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DEFENSE TECHNICAL INFORMATION CENTER

8725 JOHN J. KINGMAN RD. STE 0944
FT. BELVOIR, VA 22060-6218

IN REPLY
REFER TO

DTIC-R (FOIA 2010-27)

MAR 8 2010

This is an interim response to your letter of January 24, 2010 (attachment 1), requesting information under the Freedom of Information Act (FOIA). Under Department of Defense rules implementing the FOIA, published at 32 CFR 286, your request was categorized as "other."

Attached are computer-generated bibliographies prepared by weighting/matching the subject terms or keywords listed in your request against our database (i.e., *corporate author* "RAND CORPORATION" or "RESEARCH AND DEVELOPMENT CORPORATION" or "RAND" or "PROJECT RAND" for the years prior to 1964). The bibliographies may contain some documents that do not apply to the specific subject area(s) in which you are interested; however, to eliminate any of the key search terms would also eliminate documents that do apply to your subject area(s) of interest.

The documents listed on attachment 2 have been approved for public release and may be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161. NTIS sells such documents to the general public and, if you wish, you can order the documents by telephone at (703) 605-6000. Be sure to include the AD numbers when requesting the documents. NOTE: Some of the documents listed on the bibliography on attachment 2 can be viewed and/or downloaded in full text through the Defense Technical Information Center (DTIC) Online Public Technical Reports website at <http://www.dtic.mil/dtic/search/tr/index.html>. Once at the site, type the full document number as its written (ex: AD0425951) in the "Search for" box, then click the "Search" button; in the Accession Number field, click on the link "View Full Text (pdf)".

Attachment 3 consists of a bibliography that contains unclassified descriptions of classified and/or unclassified/limited distribution documents related to your request. These documents may only be released by the controlling activity. Requests for these

MAR 8 2010

documents should be forwarded to the controlling activity, usually identified in the Distribution Statement field of the citation. This office upon request can research documents with no controlling activity identified. NOTE: Although some of the citations listed on the bibliography at attachment 3 may indicate that the document can be viewed and/or downloaded in full text, be advised that these citations/documents are not available to the general public through the DTIC Online Public Technical Reports.

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Sincerely,



MICHAEL A. HAMILTON
Acting FOIA Program Manager

Attachments:
As Stated

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426538

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VARIETIES OF ECONOMIC SECRECY IN THE SOVIET UNION,

Personal Author(s):

Herman,Leon

Report Date:

Dec 1963

Media Count:

28 Page(s)

Report Number(s):

P2840

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426923

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTERNATIONAL DIVISION OF LABOR IN CEMA: L REGRET STRATEGY,

Personal Author(s):

Neuberger,BY Egon

Report Date:

Dec 1963

Media Count:

17 Page(s)

Report Number(s):

RM3954PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This RAND Memorandum assesses the path chosen by the member countries of the Council of Economic Mutual Assistance (CEMA) toward achieving an international socialist division of labor. Conflicting objectives; political, economic, and ideological constraints; and the lack of a satisfactory theory of division of labor in East and West prevent an optimum solution whether judged by the criteria of Western economic theory or by objectives of CEMA leaders. This Memorandum argues that the strategy followed by CEMA members is one "limited regret," a conservative policy based on risk aversion. This strategy consists of attempts to obtain some of the benefits of a division of labor while avoiding risks of large losses; CEMA countries are able to reap the benefits of comparative advantage in those cases where these benefits appear obvious, and gain from economies of scale in other cases. In view of the serious impediments to the achievement of a more effective division of labor, the relatively small steps taken thus far in CEMA seem to be sensible ones. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425951

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/425951.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD425951>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A NUMERICAL TECHNIQUE FOR SOLUTION OF MULTIDIMENSION HYDRODYNAMIC PROBLEMS

Personal Author(s):

Bjork, R
Brooks, N
Papetti, R
Report Date:
Dec 1963
Media Count:
69 Page(s)
Report Number(s):
RM2628PR
XA-USAF
Contract Number:
AF 49(638)-700
Monitor Series:
USAF
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution unlimited
Abstract:

(U) This Memorandum discusses in detail a numerical method for solving the compressible, hydrodynamic equations under the limitations of (1) two space dimensions, (2) the inviscid approximation, and (3) the adiabatic approximation. The method allows for the occurrence of shocks, contact discontinuities, and interfaces. Under a proper prescription of initial and boundary conditions, the method generates solutions including the above physical phenomena. The basis of the method is the extension to two space dimensions of the particle-in-cell (PIC) concept first proposed by Harlow for a one-dimensional computational scheme. The computational method approximates a set of partial differential equations containing terms in addition to those of the compressible, hydrodynamic equations under the approximations cited. The computational scheme contains a feature known as grid-changing, which permits optimum resolution of all phases of the problem using the limited memory capacity of present day electronic computers. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426719

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NUMERICAL SOLUTION OF FUNCTIONAL EQUATIONS BY MEANS OF LAPLACE TRANSFORM-I:
RENEWAL EQUATION,

Personal Author(s):

Bellman,R E

Kalaba,R E

Lockett,J

Report Date:

Dec 1963

Media Count:

14 Page(s)

Report Number(s):

RM3948NIH

Contract Number:

GM09608 02

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Techniques for the numerical inversion of Laplace transforms are presented. These are methods to handle convolution integrals computationally for studies of cancer chemotherapy. The techniques are also useful in treating classes of equations arising in biology, chemistry, and operations research.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426585

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NUMERICAL SOLUTION OF FUNCTIONAL EQUATIONS BY MEANS OF LAPLACE TRANSFORM-II:
DIFFERENTIAL DIFFERENCE EQUATIONS,

Personal Author(s):

Bellman,R E

Kalaba,R E

Lockett,J

Report Date:

Dec 1963

Media Count:

9 Page(s)

Report Number(s):

RM3952NIH

Contract Number:

GM09608 02

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Differential-difference equations are solved using a numerical procedure for inverting Laplace transforms. The study may be of interest to control and circuit engineers and to numerical analysts. These methods are also useful in treating wide classes of equations arising in biology, chemistry, and operational research. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426738

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MORE ON GODDARD,

Personal Author(s):

Katz,Amrom H

Report Date:

Dec 1963

Media Count:

9 Page(s)

Report Number(s):

P2838

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426922

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AGGREGATE PRODUCTION FUNCTIONS AND MEDIUM-RANGE GROWTH PROJECTIONS,

Personal Author(s):

Nelson,Richard R

Report Date:

Dec 1963

Media Count:

58 Page(s)

Report Number(s):

RM3912PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum is an analysis and comparison of the implications of several different but related aggregative models of long-run economic growth. These models differ somewhat in both their explanations of past economic growth and their projections of future growth. The analysis begins by examining the variables and relationships stressed by the various models, and the different explanations of the 1929-1960 growth record that these models provide. A general aggregative production function is developed which includes the various models as special cases. The role of growth of the labor supply, of capital formation, of technological advance, and of rising educational standards is examined within the framework of the models. Finally, the study examines a number of growth projections for the American

economy, attempts to evaluate them within the framework provided by the general model, and suggests some of the major uncertainties involved in growth projections. One of the major conclusions of the study is that projections of U.S. growth over the next decade are extremely sensitive to the economic model used in making those projections, and in particular to the assumed rates of growth of capital stock and total factor productivity. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426934

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NEURAL NET FOR ADAPTIVE BEHAVIOR,

Personal Author(s):

Block,Stanley H

Report Date:

Dec 1963

Media Count:

21 Page(s)

Report Number(s):

RM3868PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A neural net which demonstrates the concepts of adaptive biological processes as described by Ashby is presented. The basic assumption is that there exist certain cells whose firings represent a state of warning and that, to survive, the organism must keep the activity of these cells within certain limits. This net consists of four groups of cells which represent the organism and a single group of input cells which represent the environment. When the organism is presented with environmental conditions, it will demonstrate adaptive behavior, i.e., it will attempt to minimize the length of time needed to counteract the adverse effect of the environmental conditions upon the organism. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425855

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DEFORMATIONS AND MOMENTUM-ENERGY COMPLEXES,

Personal Author(s):

Edelen,Dominic G B

Report Date:

Dec 1963

Media Count:

19 Page(s)

Report Number(s):

RM3931RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Let R be a simply connected region of an Einstein-Riemann space that is filled by the trajectories of a time-oriented normal congruence K . The most general form of the momentum-energy tensor is determined under the assumption that we know the deformation of the metric tensor under transport along K . the time-like eigenvector and associated eigenvalue of this momentum-energy tensor are examined. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426478

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROBABILITY AND SCATTER IN CUMULATIVE FATIGUE DAMAGE,

Personal Author(s):

Kaechele, Lloyd

Report Date:

Dec 1963

Media Count:

70 Page(s)

Report Number(s):

RM3688PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This memorandum presents a study of the problems in aircraft design caused by scatter in fatigue life. Lives of similar test specimens under identical loading vary so greatly that fatigue is well known as a highly unpredictable phenomenon. Although attempts to predict the fatigue life of existing aircraft are greatly complicated by scatter, this unpredictability is a less severe problem in design, when the decision is made on how much material to put into a structure in order to provide satisfactory life. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426417

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ACROSS MARS BY BUS OR BICYCLE,

Personal Author(s):

Keller,Benjamin

Report Date:

Dec 1963

Media Count:

13 Page(s)

Report Number(s):

P2839

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A hypothetical discussion of the use of balloons as vehicles on Mars is presented, based on a set of general equations that describe the performance of any balloon with any payload, in any atmosphere, at any temperature. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426081

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ERROR IN ESTIMATING MISSILE POSITION AND VELOCITY AT CUTOFF FROM SMOOTHED DATA,

Personal Author(s):

Kendall,William B

Report Date:

Dec 1963

Media Count:

9 Page(s)

Report Number(s):

P2796

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theory of least mean squared error curve fitting is used to derive expressions for the accuracy with which the cutoff position and velocity of a ballistic missile can be estimated from noisy measurements. The correlation between the estimates is determined. These results are then specialized to the estimation of angular position and velocity from measurements made with an infrared tracker. Numerical examples for two possible trackers are presented. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426139

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPLETE MICROWAVE SCATTERING AND EXTINCTION PROPERTIES OF POLYDISPERSED CLOUD AND RAIN ELEMENTS,

Personal Author(s):

Deirmendjian,Diran

Report Date:

Dec 1963

Media Count:

54 Page(s)

Report Number(s):

R422PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This report determines the extinction, the albedo of single scattering, the differential scattering cross section, and the complete polarization properties, per unit volume of cloud and rain elements, when these elements are irradiated by microwave radiation at various frequencies. Continuous drop-size distribution functions are introduced to represent real clouds and precipitation, and the absorption and scattering parameters are integrated with high accuracy. A Rayleigh approximation is found adequate

for the cloud model but the complete Mie expressions had to be used for precipitation-sized particles. Older estimates have been corroborated but some new features have been brought out for the first time, such as the scattered intensity and polarization (including its ellipticity) as a function of scattering angle. The quantitative results, presented graphically and in extensive tables, will be useful in advancing cloud physics research by means of active and passive microwave techniques. The same results can be used in the theoretical interpretation of the observed continuous and discrete microwave emissions from certain planets. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426148

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON EXOSPHERIC DRAG AS THE CAUSE OF THE SUPPOSED SECULAR ACCELERATIONS OF PHOBOS,

Personal Author(s):

SCHILLING,G F

Report Date:

Dec 1963

Media Count:

12 Page(s)

Report Number(s):

RM3939PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A recent theory by Shklovskiy explained Phobos' supposed orbital accelerations by suggesting that it is an artificial satellite of Mars. Reasonable assumptions about the physical state of Mars' equatorial exosphere, however, lead to values of atmospheric density which could exert observable drag effects on Phobos, without it having to be a hollow sphere. It is further shown that a required correlation appears to exist between solar activity and reported values of the accelerations over a period of some 60 years.

As long as reliable observational evidence remains scarce, the actual existence of orbital accelerations remains in doubt. Yet, because of the potential importance of the phenomenon to the study of planetary exospheres, future observations and analyses are emphatically necessary. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426248

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF PROCUREMENT AND PRODUCT-IMPROVEMENT DECISIONS,

Personal Author(s):

Deavers,K L

McCall,J J

Report Date:

Dec 1963

Media Count:

51 Page(s)

Report Number(s):

RM3859PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This study presents several decision-making problems in Air Force procurement and productimprovement, two subjects whose many similarities justify a joint investigation. The same criterion is used in judging the effectiveness of each of these activities: the amount of operational capability possessed by the purchased or improved weapon system. The framework for the analysis in this report is adapted from microeconomic theory. The authors have translated the involved procedures of procurement and product improvement into rather simple problems of maximizing operational capability. This abstract model of behavior highlights the intimate relationship between the two activities. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426455

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND ILL-CONDITIONED LINEAR SYSTEMS,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Lockett,Joanne

Report Date:

Dec 1963

Media Count:

25 Page(s)

Report Number(s):

RM3815PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Dynamic programming, successive approximations, extrapolation, and smoothing are used to treat ill-conditioned systems. Numerical examples are given. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426082

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SPURIOUS CORRELATION DUE TO DEFLATING VARIABLES,

Personal Author(s):

Madansky,Albert

Report Date:

Dec 1963

Media Count:

7 Page(s)

Report Number(s):

RM3863PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum shows that when a homogeneous linear regression of a normally distributed variable Y on two normally distributed variables X and Z is deflated by Z, then when X and Y are uncorrelated the deflated dependent variable Y/Z and independent variable X/Z are either uncorrelated or perfectly correlated. Thus, existing approximations to the covariance of these deflated variables are poor. A new approximation to this covariance is given which has the same defect for normally distributed variables, but which could otherwise be better than existing ones. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0428912

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ' 'UNNECESSARY' ' RIFT IN NATO,

Personal Author(s):

Vandevanter,E ,Jr

Report Date:

Dec 1963

Media Count:

23 Page(s)

Report Number(s):

P 2841

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Frictions in the NATO coalition should surprise no one. Alliance have habitually been short-lived and fraught with dissension -- as a matter of fact, NATO has already established some sort of record for integration and longevity. Still, NATO partners, true to form, have wrangled continually among themselves and disagreed with the recommendations of the corporate organization. The latest schism, however, introduces a new species of discord: a rivalry between corporate agencies within the alliance machinery itself. According to observers, a feeling of resentment-possibly even animosity-has grown up between the military and political elements of the central institution. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0429404

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELECTROMAGNETIC SIGNALS PRODUCED BY LOW-ALTITUDE NUCLEAR EXPLOSIONS,

Personal Author(s):

Karzas,W J

Latter,R

Report Date:

Dec 1963

Media Count:

27 Page(s)

Report Number(s):

RM3884PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Electromagnetic signals from nuclear explosions at low altitude in the region ionized by the gamma rays are discussed. Specifically, a simplified model of an explosion is treated analytically. The model assumes the explosion takes place at a height h above an infinitely conducting ground. The ambient air is assumed to have a uniform and constant conductivity, and the explosion is approximated as a point source of gamma rays. This model is solved analytically for the magnetic field at any point about the explosion. Some numerical results illustrate the time and space variation of the magnetic field. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425851

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRANSFORMATION-THEORETIC PROBLEMS IN VARIANT FIELD THEORY I. FUNDAMENTALS,

Personal Author(s):

Edelen,Dominic G B

Report Date:

Dec 1963

Media Count:

31 Page(s)

Report Number(s):

RM3923PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theory of Variant Fields is based upon a Lagrangian formulation in which the Lagrangian function is assumed to have no preassigned transformation properties. The explicit implications of this assumption are examined in the context of the transformation properties and the structure of the variant field equations. The salient results of the previous exposition are given, as modified by the transformation-theoretic considerations. The results establish the underlying transformation-theoretic problems of geometrizable field theories. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425368

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RATE OF COMMERCIAL CONSTRUCTION IN A CROSSSECTION OF AMERICAN CITIES 1957-1958,

Personal Author(s):

BOWER,Joseph L

Report Date:

Dec 1963

Media Count:

33 Page(s)

Report Number(s):

RM3904RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This memorandum describes an econometric crosssection study of investment in commercial construction in the United States during 1957 and 1958. It develops a structural model of the two principal sectors of the commercial-construction industry -- office buildings and retail stores -and fits the model to cross-section data describing office construction in 13 standard metropolitan statistical areas

(SMSA's) and store construction in 18 SMSA's. The model used expresses the rate of investment in commercial construction as a function of revenue and cost conditions. Because measures of revenue are not always available, proxies for demand are substituted in some cases. Least-squares regression analysis confirms the model's usefulness in explaining city-to-city variations in commercial construction. Several problems with the data preclude a fully successful conclusion in any statistical sense, however. The most serious are the traditional cross-section size problem, and a lack of measures over certain important but largely qualitative aspects of the market. These problems are discussed and suggestions made on how they might be resolved in future work. To the extent that they are important problems, the fitted models remain a preliminary effort. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425587

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NEURAL NET FOR THE RECALL OF SEQUENCES,

Personal Author(s):

Paxson,E W

Report Date:

Dec 1963

Media Count:

23 Page(s)

Report Number(s):

RM3872PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The net discussed here is based on the requirement that all the elements in a sequence, presented as stimuli during a short interval of time, must remain present as a serial memory trace and be available for serial recall in the order given. Time may be represented by space storage along a chain of neurons.

Consequently, a mechanism equivalent to scanning is needed to lay down the trace and to replay the sequence. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425585

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VARIANCE OF UTILITY PARAMETER ESTIMATES AND PREDICTIONS IN SIEGEL'S MODEL OF REPETITIVE CHOICE,

Personal Author(s):

Madansky,Albert

Report Date:

Dec 1963

Media Count:

12 Page(s)

Report Number(s):

RM3933PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Siegel expected utility maximization model for the k-light experiment is reviewed, and the variances of estimates of the model parameters and of the model predictions are obtained. The Siegel experiments are analyzed, and it is shown that in no case are the observed deviations of predicted from actual behavior as great as two standard deviations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425785

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TECHNOLOGICAL ADVANCE, ECONOMIC GROWTH, AND PUBLIC POLICY,

Personal Author(s):

NELSON,Richard R

Report Date:

Dec 1963

Media Count:

19 Page(s)

Report Number(s):

P2835

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0428088

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STATISTICAL PROPERTIES OF THE BLACK BODY RADIATION FIELD,

Personal Author(s):

Holliday,Dennis

Report Date:

Dec 1963

Media Count:

9 Page(s)

Report Classification:

Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0427148
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE IMPACT OF CHANGING DEFENSE ON LOGISTICS REQUIREMENTS.
Personal Author(s):
Geisler, Murray A
Report Date:
Dec 1963
Media Count:
9 Page(s)
Report Number(s):
P2845
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0427733
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) EAST AFRICAN ECONOMIC UNION: AN EVALUATION AND SOME IMPLICATIONS FOR POLICY,
Personal Author(s):

Massell, Benton F

Report Date:

Dec 1963

Media Count:

94 Page(s)

Report Number(s):

RM3880 RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An East African common market, composed of Kenya, Uganda, and Tanganyika, has been in existence since 1922. An attempt is made to (1) assess the gains and losses resulting from the operation of this common market, both from the point of view of East Africa as a whole and that of the three participant economies individually; (2) consider the gains likely to result from continuation of the common market, in either its present or an expanded form; and (3) evaluate several measures that might improve the performance of the common market and suggest a course of action the East African governments might follow. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0346112

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/346112.pdf

Size: 14 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD346112>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PACIFICATION IN ALGERIA, 1956-1958

Personal Author(s):

Galula, David

Report Date:

Dec 1963

Media Count:

480 Page(s)

Report Number(s):

M-RM-3878-ARPA

XD-ARPA

Contract Number:

SD79

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this Memorandum, the author has reconstructed and evaluated his unique experience as participant and eyewitness in a critical period of the Algerian war. During the two years of his service in that theater, the Algerian rebels, having come within sight of victory, saw their hopes thwarted by a sudden increase in the French military effort, and both sides fought intensively for the allegiance and support of the population. The emphasis on pacification, rather than military operations, in the present study reflects the writer's special concern with that aspect of counterinsurgent warfare. Most important and generally valid five principles of counterinsurgent warfare that he found confirmed in his Algerian experience. The objective is the population. The support of the population is not spontaneous and must be acquired and organized through the efforts of the minority that actively favors the counterinsurgent. This minority will emerge, and will be followed by the majority, only if the counterinsurgent is recognized as the ultimate victor. The counterinsurgent, unlike the insurgent, needs much to achieve little, and he therefore must concentrate his efforts on one area at a time. In time, the issue of war and peace becomes the central one in any insurgency, making the relative merit and popularity of the contending causes a matter of secondary moment.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0678042

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE OBJECTIVES OF TRANSPORTATION IN ECONOMIC DEVELOPMENT,

Personal Author(s):

Heymann,Hans , Jr

Report Date:

Dec 1963

Media Count:

19 Page(s)

Report Number(s):

P-2836

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some view points are presented on the fundamental purposes of transportation in the economic society.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422719

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DIVERGENCES BETWEEN INDIVIDUAL AND TOTAL COSTS WITHIN GOVERNMENT,

Personal Author(s):

McKean,Roland N

Report Date:

05 Nov 1963

Media Count:

9 Page(s)

Report Number(s):

P2818

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0424610

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ASYMPTOTIC CONTROL THEORY,

Personal Author(s):

Bellman,Richard

Bucy,Richard

Report Date:

Nov 1963

Media Count:

16 Page(s)

Report Number(s):

RM3814PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some general problems are described concerning the asymptotic behavior of control processes as the time-interval becomes infinite. Some partial results in the general case, and a detailed analysis of a one-dimensional control process are presented. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0424587

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ALMOST AUTOMORPHIC AND ALMOST PERIODIC SOLUTIONS OF DIFFERENTIAL EQUATIONS,

Personal Author(s):

Veech, William A

Report Date:

Nov 1963

Media Count:

19 Page(s)

Report Number(s):

RM3844PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Systems of differential equations in Hilbert space with almost automorphic or almost periodic coefficients are discussed. Coalescing the techniques of Favard and Bochner, certain of their results are extended for finite-dimensional systems to the context above, and sufficient conditions are determined for almost automorphic or almost periodic solutions to exist. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0424554

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC MODELING OF INVENTORIES SUBJECT TO OBSOLESCENCE,

Personal Author(s):

Brown,George W

Report Date:

Nov 1963

Media Count:

24 Page(s)

Report Number(s):

P2825

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The models presented here arose in connection with studies on the problem of obsolescence as met in the supply system, with particular reference to spare parts for Naval aircraft. Inventory control procedures in current usage ordinarily allow for obsolescence by making an arbitrary blanket charge, to be distributed over all supply items. The models discussed are concerned with optimization of ordering and disposal decisions, leading to policies of the (s,S) type, incorporating specific elements descriptive of the uncertainty of future demand for the particular item. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0424417

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON THE COMPUTATIONAL SOLUTION OF A SYSTEM OF DIFFERENTIAL EQUATIONS WITH VARYING TIME-LAGS,

Personal Author(s):

Bellman,Richard

Kotkin,Bella

Report Date:

Nov 1963

Media Count:

5 Page(s)

Report Number(s):

RM3835NIH

Contract Number:

GM09608 02

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is briefly indicated how a technique for the reduction of the solution of differential difference equations with one time-lag to the solution of systems of ordinary differential equations can be extended to the more complex situation involving different time-lags. This method is of some importance in connection with the study of more realistic models of chemotherapy. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0424632

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EXAMPLE OF A TRANSIENT SET WHICH HAS THE PROPERTY THAT THE EXPECTED NUMBER OF VISITS IS INFINITE,

Personal Author(s):

Bucy, Richard S

Report Date:

Nov 1963

Media Count:

7 Page(s)

Report Number(s):

RM3864PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theory of random walks is of basic importance in many problems of pure and applied probability. The present study gives a small but crucial result relating random walks to potential theory. An example is presented of a transient set having the property that the expected number of visits is infinite.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0423315

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COUNTING CORRELATIONS IN BOSON BEAMS,

Personal Author(s):

Holliday,Dennis

Sage,Martin L

Report Date:

Nov 1963

Media Count:

60 Page(s)

Report Number(s):

P2827

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The photon counting correlation phenomena first observed by Hanbury Brown and Twiss are analyzed using methods from the theories of stochastic processes and quantized fields. It is demonstrated that quantized field which is excited by a c-number source exhibits counting correlations of the Hanbury Brown and Twiss type when the c-number part of the field is a random process with statistically independent modes, an example of which is shown to be the black-body radiation field. The counting covariance for such fields is found to be the sum of two terms: a quantum mechanical term which is a consequence of the lack of commutability of the field operators and a term which can be derived from

classical theory. This result is shown to be consistent with the existing counting correlation experiments.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422718

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE BROOKINGS REPORT ON THE BALANCE OF PAYMENTS,

Personal Author(s):

Mendershausen,Horst

Report Date:

Nov 1963

Media Count:

20 Page(s)

Report Number(s):

P2817

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The principal conclusion of this study of balance of payments prospects for 1968 is expressed in the authors' words: "Our best guess is hat the basic deficit will be eliminated." The meaning of this statement is further clarified in the leading recommendation regarding measures to improve the balance of payments, which is negative: "We do not recommend that the government at this time take any steps to improve the balance of payments other than measures which seem desirable in themselves." The authors argue that the pursuit of basic national objectives, summarized as economic growth and stability at home and abroad, maintenance of Free-World military strength, and freedom of economically productive transactions in the Free World, should not be jeopardized by preoccupation with the balance of payments. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422766

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESCAPE PROBABILITY FOR A HALF LINE,

Personal Author(s):

Port,Sidney C

Report Date:

Nov 1963

Media Count:

6 Page(s)

Report Number(s):

RM3919PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The escape probability is explicitly derived from a half line for a one-dimensional transient random walk with finite first moment. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422953

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMICS OF ZIRCONIUM ALLOY VERSUS STAINLESS STEEL NUCLEAR FUEL SHEATHING,

Personal Author(s):

Trapp,D L

Report Date:

Nov 1963

Media Count:

19 Page(s)

Report Number(s):

P2822

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Conclusions: Increasing the uranium carrying charge from 4.75%/yr to 12%/yr raises the fuelcycle cost by about 0.5 mill/kwhe with stainlesssteel cladding and 0.25 mill/kwhe with zircaloy. The optimum burnup becomes lower with higher carrying charges. For all cost bases, fuelcycle costs with zircaloy are appreciable lower than with stainless steel. The difference is greater when uranium is purchased than when leased. However, zircaloy might not have this advantage if thin-walled rather than freestanding cladding were used. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616728

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RAND CORPORATION; THE FIRST FIFTEEN YEARS.

Report Date:

Nov 1963

Media Count:

51 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422713

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ADAPTIVE CONTROL VIA QUASILINEARIZATION AND DIFFERENTIAL APPROXIMATION,

Personal Author(s):

Bellman,R

Kalaba,R

Sridhar,R

Report Date:

Nov 1963

Media Count:

19 Page(s)

Report Number(s):

RM3928PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An adaptive controller is one which has the capability to learn from experience and in so doing improves the quality of the control it exerts over a plant. Such a controller adapts itself to circumstances as it finds them. The potential military and commercial applications of such devices are impressive. The aim of this Memorandum is to show that the basic system identification and state determination problems can be viewed, mathematically, as nonlinear multipoint boundary value problems. They can be resolved, computationally, via use of quasilinearization and differential approximation. The net result is that we now possess straightforward and effective procedures for designing wide classes of adaptive controllers. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0423944

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/423944.pdf

Size: 190 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD423944>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LAMINAR COMPRESSIBLE MIXING BEHIND FINITE BASES

Personal Author(s):

Lykoudis, Paul S

Report Date:

Nov 1963

Media Count:

10 Page(s)

Report Number(s):

RAND-P-2828

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0423348

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTERZONAL TRADE IN GERMANY, PART II. INTERACTION WITH EARLY BERLIN CONFLICTS,

Personal Author(s):

Mendershausen,Horst

Report Date:

Nov 1963

Media Count:

60 Page(s)

Report Number(s):

RM3688PR pt. 2

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This is the second part of a continuing study of the economic relations between West and East Germany, and their interaction with political developments in the Berlin area and elsewhere. It describes and analyzes the beginning of interzonal trade, and the relations between this trade and the "Berlin conflicts" in the period 1948 to 1952. The study recalls some of the early phases of the struggle over the body and soul of Europe that began with Hitler's downfall and has continued ever since. To see the struggle through to a good conclusion, it is important that the West remain aware of its history.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0423695

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIMULATING WITH SIMSCRIPT,
Personal Author(s):
Markowitz,Harry M
Report Date:
Nov 1963
Media Count:
15 Page(s)
Report Number(s):
P2826
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0423859
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A NOTE ON PESEK'S METHOD FOR MEASURING THE RATE OF ECONOMIC GROWTH,
Personal Author(s):
Nichols,Russell T
Report Date:
Nov 1963
Media Count:
3 Page(s)
Report Number(s):
P2824
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0423922

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/423922.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD423922>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PARAMETRIC LIMITS FOR THE UPPER ATMOSPHERE OF MARS

Personal Author(s):

Schilling, G F

Report Date:

Nov 1963

Media Count:

52 Page(s)

Report Number(s):

RM3885PR

XC-AFOSR

Contract Number:

AF49(638)700

Monitor Series:

AFOSR

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Probable upper and lower limits are calculated for the distribution of atmospheric pressure and mass density in the upper atmosphere of Mars. The results extend an earlier engineering model atmosphere from an altitude of 150 km to one in excess of 2500 km above the planetary surface. They derive, in part, from a recent analysis by J. W. Chamberlain of the probable thermal regime in the upper atmosphere of planets, while taking into account our present uncertainties about the lower atmosphere of Mars.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0423764

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PERISCOPE ANTENNA SYSTEMS WITH OPTIMALLY CURVED REFLECTORS,

Personal Author(s):

Bedrosian,Edward

Report Date:

Nov 1963

Media Count:

24 Page(s)

Report Number(s):

RM3930PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Microwave radio relay systems frequently employ periscope antennas to avoid long cable runs to tower-mounted antennas. Early periscope antennas used flat reflector plates, while modern systems employ curved reflectors which, in effect, focus the incident energy to achieve additional gain. Analyses of the flat and paraboloidally curved reflectors are available in the technical literature, but the latter analysis does not incorporate a model of curvature which is optimum for certain ranges of the antenna system parameters. The analysis presented here develops a criterion for optimum curvature of the reflector. The resulting optimum gain is computed and seen to be equal to or greater than that available from the comparable flat or paraboloidal reflector. Typical wavefronts at the reflector are also computed and presented as aids in determining the optimum curvature required. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0423617

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DIURNAL VARIATION OF TEMPERATURE AND PARTICLE DENSITY BETWEEN 100 KM AND 500 KM,

Personal Author(s):

Kallman-Bijl, H K

Sibley, W L

Report Date:

Nov 1963

Media Count:

35 Page(s)

Report Number(s):

RM3847PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Rocket and satellite observations, made in the U.S.A. and in the U.S.S.R. of atmospheric densities and oxygen ratios $n(O)/n(O_2)$ were used to determine the diurnal variations of pressure, temperature, and composition in the region between 100 and 500 km. The six main constituents of the earth's upper atmosphere are included: molecular nitrogen and oxygen, atomic oxygen, argon, helium, and hydrogen. It has been found that for late 1960: (1) The nighttime mass densities are higher between 100 and about 200 km than the daytime densities; the opposite is the case above 200 km. (2) The nighttime temperatures are always lower between 100 and 500 km than the daytime temperatures. In the exosphere T (night) is approx. 1000 K; T (day) is approx 1350 K. (3) Between about 110 and 200 km the molecular weight at night is higher than by day. Above 200 km the opposite occurs. (Author)

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0422513

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMAL PROCEDURES FOR THE INSTALLATION OF A UNIT SUBJECT TO STOCHASTIC FAILURES,

Personal Author(s):

Port,Sidney C

Report Date:

Nov 1963

Media Count:

12 Page(s)

Report Number(s):

RM3910PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) There is investigated a mathematical model of a system, such as a missile system, subject to stochastic failures, when there is at one's disposal only a limited number of spare parts. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426174

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CLOSURE TECHNIQUES FOR INFINITE SYSTEMS OF DIFFERENTIAL EQUATIONS,

Personal Author(s):

Bellman, Richard

richardson, John M

Report Date:

Nov 1963

Media Count:

6 Page(s)

Report Number(s):

RM3821

Contract Number:

SD79

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0431867

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ENERGY DEPOSITION IN THE ATMOSPHERE FROM HIGH ALTITUDE GAMMA RAY SOURCES,

Personal Author(s):

Marcum,J I

Report Date:

Nov 1963

Media Count:

28 Page(s)

Report Number(s):

RM3594PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Results for the deposition of energy in the atmosphere from two high altitude sources of gamma rays are given. The solutions were obtained by use of the RAND Monte Carlo gamma ray transport code and are presented in such a way that they can be easily compared to results previously obtained for infinite homogeneous media. It has been shown in two particular cases that the deposition of energy from high altitude sources of gamma rays over a large volume of space does not differ from the equivalent problem with a uniform atmosphere by more than a factor of two. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604852

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POSSIBLE GALACTIC SCALE DISCRETIZATION,

Personal Author(s):

Edelen,Dominic G B

Report Date:

Nov 1963

Media Count:

84 Page(s)

Report Number(s):

RM-3941-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents the analysis of a class C of quasioblate spheroidal galactic structures, the results pertinent to the quasi-spherical structures being a special case. The results are confined primarily to the implications of the eigensequence that delineates the underlying geometric configurations and the corresponding discretization effects.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0429982

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ECONOMIST LOOKS AT R+D MANAGEMENT,

Personal Author(s):

Glennan,Thomas K ,Jr

Report Date:

Nov 1963

Media Count:

9 Page(s)

Report Number(s):

P2819

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0428158

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECTS OF NEUTRONS FROM HIGH-ALTITUDE DETONATIONS,

Personal Author(s):

Tamarkin,P

Report Date:

Nov 1963

Media Count:

13 Page(s)

Report Number(s):

3932PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Consequences of the decay of neutrons from highaltitude nuclear detonations in equatorial regions are examined. Sample temporal variations of night-time D-layer ionization profiles resulting from direct precipitation of neutron-decay betas are presented for pure fission and for 1 KEV thermal source-neutron spectra. There are large differences, between the two cases, in the maximum amount of ionization produced and number of seconds required to attain maximum ionization. These differences emphasize the need to consider actual spectra of neutrons from high-altitude detonations in the study of the VLF propagation anomalies they produce. Under certain stated conditions the energetic protons from the decay of similarly energetic neutrons can cause more D-layer ionization than do the decay betas, with especial consequences for affecting VLF propagation over day-lit paths. A similar comparison for 12 to 14 MEV trapped protons leads to the conclusion that 10 to the twenty-fifth power neutrons set free with energies between 12 and 14 MEV would produce a differential directional flux equal to that measured in the region near $L = 2.5$. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425784

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BRIEF DISCUSSION OF THE VALUE OF DEFENSE,

Personal Author(s):

Levien,Roger

Report Date:

Nov 1963

Media Count:

10 Page(s)

Report Number(s):

P2831

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The object of this study is to assist the defense planner by establishing a framework for the many aspects of the value of defense and then employs that framework to gain an overall appreciation of that value. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425027

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HOW TO BUILD AND ANALYZE DECISION TABLES,

Personal Author(s):

Pollack,Solomon L

Report Date:

Nov 1963

Media Count:

17 Page(s)

Report Number(s):

P2829

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Decision tables, a framework for describing a set of related decision rules, can improve the communication and documentation achievable by previous techniques such as flow charting and narrative descriptions of data processing problems, particularly those containing many complex decision rules. In addition, decision tables offer system analysts the potential to eliminate inconsistencies and

redundancies in each set of specified decision rules and to produce computer programs that are efficient in the use of computer storage and computer running time. Decision tables also enable the system analyst to determine if he has considered all of the possible decision rules that can be formed from a particular set of conditions. The conversion of system applications to decision tables is described, a process which entails making decisions on how large the individual tables should be and what system parameters should be included. The technique for reducing the number of written decision rules is also described. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425127

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RADIATIVE EQUILIBRIUM OF THE MESOSPHERE,

Personal Author(s):

Leovy,Conway

Report Date:

Nov 1963

Media Count:

35 Page(s)

Report Number(s):

P2833

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Results of joint photochemical-radiative equilibrium calculations for the mesosphere and upper stratosphere are presented. The major assumptions were that only oxygen allotropes participate in the chemistry and that the radiative balance is between absorption of solar radiation by molecular oxygen and ozone and infrared emission by carbon dioxide and ozone. Equilibrium temperatures and ozone concentrations for winter and summer were calculated by two methods: an iterative procedure assuming a steady state, and as the asymptotic limiting distributions of a marching problem. The second

method gives lower temperatures than the first in the upper mesosphere because of the diurnal variations in ozone concentration. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425026

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IMPRESSIONS OF MILITARY POLICY IN TANGANYIKA (EAST AFRACA),

Personal Author(s):

Glickman,Harvey

Report Date:

Nov 1963

Media Count:

16 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425953

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTATION OF THE MATRIX ELEMENTS OF QUANTUM MECHANICS,

Personal Author(s):

Peebles,Glenn H

Report Date:

10 Oct 1963

Media Count:

39 Page(s)

Report Number(s):

RM3826PR AEC

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This memorandum develops numerical methods for each of the three calculations into which the computation of a matrix element separates. Criteria are set up which so govern the numerical methods that large arrays of matrix elements associated with a specified potential are calculated rapidly and with controlled accuracy. The principal device for gaining speed consists of arranging the calculation in such a way that each wave function and each matrix element is advanced on one and the same interval before going on to the next interval; the larger the ratio of the number of matrix elements to the number of wave functions, the more effective is this device. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0420212

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INFORMATION SYSTEMS FOR CITY MANAGEMENT,

Personal Author(s):

Hearle, Edward F R

Report Date:

Oct 1963

Media Count:

11 Page(s)

Report Number(s):

P2803

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422258

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF LIST-PROCESSING COMPUTER LANGUAGES,

Personal Author(s):

Bobrow, Daniel G

Raphael, Bertram

Report Date:

Oct 1963

Media Count:

37 Page(s)

Report Number(s):

RM3842PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A detailed comparison is presented of COMIT, IPL-V, LISP 1.5, and SLIP-four well-known computer programming languages which, among them, exhibit all the principal characteristics of existing list-processing languages. Important common features of list-processing languages are reviewed: forms of data structures which are manipulated; necessity for dynamic allocation of storage; use of pushdown stores; and use of recursive operations. Principal differences between the four languages under consideration are detailed: representations of data, both by the programmer and within the machine; methods for storage allocation; programming formalisms and special processes available, including arithmetic facilities; and usability in terms of availability, documentation, learning aids, and debugging

facilities. Finally, the authors give some heuristics to aid in the selection of one of these languages for use in particular problem applications, concluding that no one of the languages considered is distinctly superior over all possible list-processing applications. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422082

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE CHALLENGES AND OPPORTUNITIES OF DEFENSE, STRATEGY AND LOGISTICS,

Personal Author(s):

Zwick, Charles J

Report Date:

Oct 1963

Media Count:

13 Page(s)

Report Number(s):

P2804

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Implications for future defense transportation requirements: future defense transportation requirements may need consideration of prospective changes in defense strategy and logistics; a national policy of maintaining options by which the United States can respond in any one of several ways in the face of a particular threat; the goal must be to develop a transportation system that can accept unexpected workloads and respond rapidly; new management control techniques are affecting all sectors of our economy; new analysis capabilities are allowing organizations to rationalize their operations; increased ability to plan and control operations means that organizations are tending to substitute modern communications, high-speed transportation, and tighter management, for inventories of expensive resources -- both materiel and personnel. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0420116

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE USE OF THE CALCULUS OF VARIATIONS IN TRAJECTORY OPTIMIZATION PROBLEMS,

Personal Author(s):

Stechert,D G

Report Date:

Oct 1963

Media Count:

65 Page(s)

Report Number(s):

RM3793PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theory of the calculus of variations is reviewed, including such subjects as the EulerLagrange equations, the transversality condition, the problems of Bolza, Lagrange, and Mayer, the corner condition, and the Weierstrass condition. Applications to a number of problems are given. These include that of a damped harmonic oscillator that is to be brought to rest in the shortest possible time. This problem is sufficiently simple to allow a clear demonstration of the theory. The close relationship between the ballistic perturbation theory and the calculus of variations is explained. The perturbation theory is then applied to the case of the trajectory in a constant gravity field. (Author)

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0608408

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A FEW ROCK MECHANICS PROBLEMS IN CORRELATING LABORATORY RESULTS WITH PROTOTYPE REACTIONS,

Personal Author(s):

JUDD,Wm R

Report Date:

Oct 1963

Media Count:

38 Page(s)

Report Number(s):

P-2806

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Consideration of the application of laboratory test results in prediction of the reaction of a rock massif led to the conclusion that physical properties of rock should be measured to provide data on rock necessary for engineering design. One approach for such correlation was a field test on a small-scale model of a prototype for the proposed underground storage of gas. Laboratory tests of the dacite porphyry indicated too broad a range of data to provide a safe factor for prototype design so that determination of rock modulus by field test appeared desirable. Maximum 400-psi pressure was not achieved in the steel-linetest chamber since the steel lining ruptured at 2650 psi. Conclusions of the project are that geological defects in rock massif are a prime consideration in determining the deformation modulus of rock. A reasonable safety factor for design purposes would require a design modulus about onetenth of the laboratory modulus. Also, when grouting must be used to produce a monolithic rock mass, with resultant improvement in elastic modulus of the massif, there must be enough coring and seismic testing to determine whether there is effective grout penetration.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422502

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRAJECTORY AND ORBIT PLOTTER INSTRUCTION MANUAL,

Personal Author(s):

Frick,R H

Rumer,W I

Sharkey,E H

Report Date:

Oct 1963

Media Count:

217 Page(s)

Report Number(s):

R418PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A graphical method for obtaining the solution of a large class of trajectory and orbit problems is described. By this method it is possible, given a set of initial conditions, to construct the resulting trajectory or orbit and determine the velocity path angle, ground range, altitude, and time of flight corresponding to any point of the path. In addition, it is also possible to take into account the effects of earth rotation on the ballistic path and to determine the latitude and longitude of points on the earth trace, including the impact position. The equipment required for applying this method includes a trajectory chart, an earth rotation chart, and a protractor, copies of which are included. This equipment has been designed so that a user, with a knowledge of simple arithmetic and a few basic geometrical constructions, as well as the ability to follow directions, can obtain rapid solutions to trajectory and orbit problems with an accuracy of the order of 0.5 per cent in the results. The method should have considerable application to the class of problems not requiring the extreme precision of the high-speed digital computer. Such problems would include preliminary design missile performance determinations, feasibility studies, and trajectory and orbit prediction problems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0421979

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TIPL. TEACH INFORMATION PROCESSING LANGUAGE,

Personal Author(s):

Dupchak,Robert

Report Date:

Oct 1963

Media Count:

25 Page(s)

Report Number(s):

RM3879PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) TIPL is a system to assist students in learning IPL-V, a list-processing computer language, and is used in conjunction with the problems contained in the Information Processing Language-V Manual. It accepts as input a student's program and it proceeds to check the correctness of the program. The first section of this Memorandum is intended for the student. It describes how he must prepare his program deck and what conventions he must observe. The second section describes how the system operates and the manner in which the instructor may modify old problems and add new ones. Since TIPL is written entirely in IPL-V, it requires only minimal effort to incorporate it into any IPL-V processor. Those interested in obtaining tape copies of the program should write The RAND Corporation for further information. The program is written on IBM tape as a single file of BCD card images. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422016

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/422016.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD422016>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN ECONOMETRIC MODEL OF METROPOLITAN EMPLOYMENT AND POPULATION GROWTH

Personal Author(s):

Niedercorn, John H

Report Date:

Oct 1963

Media Count:

45 Page(s)

Report Number(s):

RAND-RM-3758-RC

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Abstract:

(U) This Memorandum presents an econometric model describing the growth of metropolitan employment and population. The analysis is carried out for three geographical areas, the entire Standard Metropolitan Statistical Area (SMSA), the central city, and the metropolitan ring (the part of the SMSA lying outside the central city). A mathematical model was constructed to describe changes taking place in each of the three geographical areas in manufacturing, wholesaling, retailing, and selected service trades; in finance, insurance, and real estate; in transportation, communications, and public utilities; and in government administrative employment, and residential population. The model's parameters were estimated using data taken from a sample of 41 of the largest SMSAs. The model was then used to forecast ten-year changes in employment and population for 36 of the nation's most important metropolitan areas.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0420867

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GEOMAGNETISM AND THE IONOSPHERE,

Personal Author(s):

Vestine, E H

Kern, J W

Report Date:

Oct 1963

Media Count:

38 Page(s)

Report Number(s):

P2801

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The geometry of the magnetosphere and the dynamics of energetic particles and plasma trapped within it are discussed in relation to some problems of geomagnetism. Local acceleration of trapped particles is discussed, and the possible origins of electric fields and their roles in this and other magnetospheric phenomena are outlined. It is found that many phenomena of interest may be newly interpreted in terms of a slight extension of the original Chapman--Ferraro theory of geomagnetic storms. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0421142

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME PITFALLS IN THE ANALYSIS OF RESIDENTIAL LOCATIONAL PREFERENCES,

Personal Author(s):

Brigham, Eugene F

Report Date:

Oct 1963

Media Count:

8 Page(s)

Report Number(s):

P2807

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Professor Frieden has provided planners with a valuable tool for analyzing the strength of a metropolitan population's preference for a central residential location. This is a significant contribution, since important decisions involving millions of dollars must or at least should be based on this preference. In illustrating his methodology, however, Frieden commits two errors: he uses a single, atypical sample to represent an entire area, and he fails to take an important factor, the amenity level, into account. As suggested in this paper, these errors of analysis could possibly lead to seriously mistaken decisions, so it is suggested that Frieden's conceptual scheme be modified to employ some form of multivariate analysis. Further, it is urged that extreme care be given to the selection of the sample upon which the analysis is based. With these modifications, studies similar to Frieden's pioneering efforts should provide city and regional planners with many valuable insights into the complex patterns of relationships found in our metropolitan areas. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0421860

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME TOPICS IN TWO-PERSON GAMES,

Personal Author(s):

Shapley,Lloyd S

Report Date:

Oct 1963

Media Count:

42 Page(s)

Report Number(s):

RM3672 1PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Several loosely-related essays are considered on the theory of finite, two-person games. The topics are (1) the block decomposition of symmetric games, (2) saddlepoints in matrices having submatrices with saddlepoints, (3) generalized saddlepoints and order matrices, (4) the existence of values in games with almostperfect information, and (5) the nonconvergence of fictitious play in non-zero-sum games. Throughout, there is an emphasis on features of the theory that depend only on the ordering of the payoffs, as opposed to their numerical values. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0421877

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EQUIVALENCE OF SOME NECESSARY CONDITIONS FOR OPTIMAL CONTROL IN PROBLEMS WITH BOUNDED STATE VARIABLES,

Personal Author(s):

Berkovitz,Leonard D

Dreyfus,Stuart E

Report Date:

Oct 1963

Media Count:

19 Page(s)

Report Number(s):

RM3871PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem of optimal control is considered as earlier studied separately by Gamkrelidze, Berkovitz, and Dreyfus --wherein a constraint is placed on the state variables. The three have studied the problem from different viewpoints: Gamkrelidze accounts for the constraint by modifying Pontryagin's maximum principle arguments; Berkovitz applies directly the classical theory developed for the problem of Bolza; and Dreyfus utilizes a dynamic programming approach. The results deduced by the latter approach, in some respects, appear to be unrelated to the Gamkrelidze and Berkovitz results, which are in agreement. It is demonstrated that the two sets of results are actually related. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0421482

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A THEOREM OF FRITZ JOHN IN MATHEMATICAL PROGRAMMING,

Personal Author(s):

Cottle,Richard W

Report Date:

Oct 1963

Media Count:

10 Page(s)

Report Number(s):

RM3858PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0421060

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SPECTRAL ANALYSIS OF THE ANISOTROPIC NEUTRON TRANSPORT KERNEL IN SLAB GEOMETRY
WITH APPLICATIONS,

Personal Author(s):

Leonard,A

Mullikin,T W

Report Date:

Oct 1963

Media Count:

44 Page(s)

Report Number(s):

RM3807PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A spectral analysis of the transport kernel for anisotropic scattering in finite slabs is achieved by first solving a type of generalized scattering problem for a subcritical slab. Initially, the scattering problem is

stated as an inhomogeneous integral transport equation with a complex-valued source function. This is readily transformed to singular integral equations and linear constraints in which the space and angle variables enter as parameters. The singular equations are transformed to Fredholm equations by an extension of Muskhelishvili's standard method and by analytic continuation. It is shown that for a wide class of scattering functions this particular Fredholm reduction yields equations which converge rapidly under iteration for all neutron productions and slab thicknesses. Specific applications to linear anisotropic and isotropic scattering in slab geometry are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0420361

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GENERAL VIEWPOINT ON SHIFT-REGISTER SEQUENCES,

Personal Author(s):

Reed, I S

Report Date:

Oct 1963

Media Count:

19 Page(s)

Report Number(s):

RM3874PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The shift-register counter is a device comprised of a small number of digital flip-flops interconnected to emit a long, predetermined, nonrepeating series of binary bits. The theory of their design is examined, concentrating on the synthesis of counters able to create extremely long sequences by sequentially modifying the effective connections or operators in the feedback loops. Non-linear shift-registers are examined from several different points of view, and then the insight so afforded is applied

to generalize upon the possible directions which might yield maximal length sequences with a minimum of equipment. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422015

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COMMUNIST CHINA'S FOREIGN TRADE: PRICE STRUCTURE AND BEHAVIOR 1955-1959,

Personal Author(s):

Mah, Feng-hwa

Report Date:

Oct 1963

Media Count:

127 Page(s)

Report Number(s):

RM3825RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analysis of the various factors that might contribute to the observed 'China differential' leads to the following tentative conclusions: (1) The commodity quality differences can at most be only partly responsible for these differentials, for, when the more heterogeneous commodities are eliminated from our sample, the differentials increase. (2) Although Communist China's overdependence on the USSR in its trade might be partly responsible for the unit value differentials, it is not likely to be an important factor. This is evidenced by the fact that the Sino-Soviet terms of trade, compared with those of Free Asian countries' trade with the rest of the world, do not show relative deterioration during this period, except for 1959. (3) The Soviet foreign trade valuation procedure includes the seller's domestic transport costs in the unit values. The high cost of long rail hauls to the Sino-Soviet border seems to be the major reason for the observed China differential. That there is a greater differential in Communist China's imports than in its exports can largely be explained by the fact that for the route between, say, Moscow and Peking, the distance is much the greater on the Soviet side of the border. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426508

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REAL WAGES IN SOVIET RUSSIA SINCE 1928,

Personal Author(s):

Chapman,Janet G

Report Date:

Oct 1963

Media Count:

395 Page(s)

Report Number(s):

R371PR

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This volume is one of a series of studies that RAND has been conducting on different facets of the Soviet economic-military potential. Because the Soviet government has published information on the cost of living and real wages only during favorable periods, there has been a crucial gap in our knowledge of the Soviet worker's standard of living. Grounded on the economic theory of index numbers, and drawing heavily on a number of earlier RAND studies, this Report presents the first detailed and fully documented Western study of nonagricultural real wages in the Soviet Union from the eve of the first Five Year Plan in 1928 to the present. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0429350

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMODITY POLICY AND ECONOMIC DEVELOPMENT,

Personal Author(s):

Pincus,John A

Report Date:

Oct 1963

Media Count:

81 Page(s)

Report Number(s):

RM3887ISA

Contract Number:

SD79

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Alternative sources are discussed of foreign exchange, and conclusions are made that none of these are likely to compensate fully for the decline in commodity prices. A commodity-by-commodity discussion of the impact of a system of effective international price-fixing agreements on the foreign exchange earnings of underdeveloped countries, both individually and in the aggregate is presented. The Memorandum then analyzes the conditions required to make such agreements effective in fixing prices, and also analyzes the arguments for and against entering agreements of this nature, whether or not effective. On the basis of this analysis and discussion, given certain assumptions about demand elasticities, a system of price-fixing commodity agreements to establish long-run monopoly prices for five commodities, could result, over the current decade, in an average annual increase of foreign exchange earnings of nearly \$800 million to the less developed countries. Finally, it is pointed out that many countries export crops unsuited to the commodity agreement technique, and would not be helped by these agreements. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0427146

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAN'S THERMAL BALANCE IN SPACE ENVIRONMENTS,

Personal Author(s):

Roth, Herman P

Report Date:

Oct 1963

Media Count:

14 Page(s)

Report Number(s):

P2810

Contract Number:

NASr21 08

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0429978

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/429978.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD429978>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COMMUNIST CHINA'S MILITARY DOCTRINE AND STRATEGY

Personal Author(s):

Hsieh, Alice L

Report Date:
Oct 1963
Media Count:
41 Page(s)
Report Number(s):
XC-USAF
Contract Number:
AF 49(638)-700
Monitor Series:
USAF
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0429985
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) CONSIDERATIONS IN THE ANALYSIS OF ALTERNATIVE POSTURES FOR RAPID DEPLOYMENT OF
COMBAT FORCES,
Personal Author(s):
Rainey, Richard B , Jr
Report Date:
Oct 1963
Media Count:
12 Page(s)
Report Number(s):
P2811
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422717

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BRITISH DEFENSE POLICY AND NATO,

Personal Author(s):

DeWeerd,H A

Report Date:

Oct 1963

Media Count:

20 Page(s)

Report Number(s):

P2814

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0423093

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON LOMOV'S SOVIET MILITARY DOCTRINE,

Personal Author(s):

Wolfe,Thomas W

Report Date:

Oct 1963

Media Count:

17 Page(s)

Report Number(s):

P2816

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417107

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON INVARIANT IMBEDDING AND GENERALIZED SEMI-GROUPS,

Personal Author(s):

Bellman,Richard

Brown,Thomas A

Report Date:

Sep 1963

Media Count:

5 Page(s)

Report Number(s):

RM-3834-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The use of fixed-point techniques is extended to the solution of certain partial differential equations. These equations have application to problems of neutron transport. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0419487

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

Kozak,TR BY A S

Report Date:

Sep 1963

Media Count:

70 Page(s)

Report Number(s):

RM-3804-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum is a translation of the Appendix of the book, Elements of Programming. The book itself is a general introduction to the subject of electronic computing, with particular emphasis on serving as a guide to programmers. It is intended for use by university students and students in advanced technological institutions. The interesting feature of the book is the Appendix, which details the command structures and systems of notation for the five Soviet computers: BESM, Strela, Ural, M-3, and Kiev. Additionally, some specifications for each of the computers are included. The Introduction prepared by the editors of the Soviet Cybernetics Technology series contains summaries of the operations codes for the five machines in chart form. It also contains comments on the problems one encounters in trying to make analyses of the Soviet state of the art, pointing out the vast differences that are found when comparing two different authors' comments on the same machine. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417653

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE WHY AND W OF COMPUTING IN THE SECONDARY SCHOOLS,

Personal Author(s):

Gruenberger, F J

Report Date:

Sep 1963

Media Count:

9 Page(s)

Report Number(s):

P2768

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Assuming that knowledge of computing and computers is good and that large numbers of people must be trained and educated each year from now on. The question is, do we want this training and education to begin prior to college. It is obvious that many believe that computing belongs in the high school, but the reasons need examination. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0419592

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THREE PAPERS ON RADIATIVE TRANSFER FROM ' ' INVESTIGATIONS OF THE PHYSICS OF THE ATMOSPHERE, ' ' NO. 3, ACADEMY OF SCIENCES, ESTONIAN S.S.R., 1962,

Personal Author(s):

Mullamaa ,Yu

Avaste,O

Report Date:

Sep 1963

Media Count:

97 Page(s)

Report Number(s):

RM-3869-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Contents: The Diffuse Reflection and Transmission of Light by Two Isotropic Media Separated by a Rough Surface; The Spectral Distribution of Direct and Diffuse Radiation; and An Approximate Solution to the Problem of Radiative Transfer in the Case of Anisotropic Scattering.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417648

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) WHAT SHOULD WE COMPUTE,

Personal Author(s):

Gruenberger, J

Report Date:

Sep 1963

Media Count:

14 Page(s)

Report Number(s):

Rept. no. P2786

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) If computers are to be used efficiently (that is, in a manner that is healthy for both the user and the vendor), then we should define what constitutes a good computer problem. It seems patently obvious that if the wrong problems are put on the machines, inefficiency-or bankruptcy-will result. Fortunately, many problems are good computing problems intrinsically and intuitively. As with many things, the extremes are obvious; the purpose of analysis is to allow us to discriminate between the borderline cases. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0419616

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EUROPEAN SOVIET BLOC AND THE WEST AS MARKETS FOR PRIMARY PRODUCTS,

Personal Author(s):

Neuberger,Egon

Report Date:

Sep 1963

Media Count:

57 Page(s)

Report Number(s):

RM-3745-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In an earlier study the author evaluated this claim by comparing the USSR with seven leading Western industrial countries. The present Memorandum represents an attempt to broaden the analysis by including five Eastern European members of the Soviet Bloc, in order to discover whether the earlier conclusions apply to the European Soviet Bloc as a whole. For the purpose of testing Communist claims,

three other criteria are selected: the size, the growth, and the stability of the market. The performance of the European Soviet Bloc and of the Eastern European countries is compared with that of seven leading Western countries (the United States, United Kingdom, and the Common Market countries), and that of the Common Market countries separately. In the case of the USSR, official trade statistics provided data on both values and quantities of imports, enabling us to test Soviet claims with respect to the total value, the physical quantity, and the unit values of imports. Unfortunately, no Eastern European country provided value data for each of the six years, and this Memorandum can therefore say little about the important measures of performance based on total value and unit value of imports; it focuses on quantity of imports. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417337

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE INFORMAL HISTORY OF IMAGE EVALUATION TECHNIQUES AND PRACTICE,

Personal Author(s):

Katz, Amrom H

Report Date:

Sep 1963

Media Count:

23 Page(s)

Report Number(s):

P2789

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The advances in camera and lens design and the availability of remarkable new emulsions have emphasized the problems of testing photographic systems. The discussion in this paper is designed to furnish some perspective on the development of camera-lens-system testing techniques, and urges restraint before we get committed to new test methods which may produce more arguments than universally agreed-on results. In addition, questions are raised on the fundamental meaning and

purpose of tests. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0419391

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INITIAL SUPPORT PLANNING: PROBLEMS AND METHODS,

Personal Author(s):

Campbell,H S

Report Date:

Sep 1963

Media Count:

23 Page(s)

Report Number(s):

RM-3845-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The general hypothesis of this Memorandum is that a significant portion of the initial support planning problem concerns deciding on the proper location of major logistics activities such as the repair of engines, the repair of aircraft components, the performance of scheduled maintenance, and the correction of malfunctions that can safely be deferred or that are relatively rare. The study examines data describing the logistics inputs required by a currently operational airplane, and discusses the task of acquiring planning input information at the time of initial provisioning. A method is discussed for analyzing the parts-repair function, considering support costs for base-level repair (ground equipment, personnel, supply of bits and pieces-4d demands for depot supply and transportation), and using shelf fill rate as a proxy for military effectiveness. The investigation shows the possibility of cost reductions from a mixed or selective policy with regard to base repair. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0418738

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE WATER CONTENT OF VENUS INFERRED FROM HER MICROWAVE BRIGHTNESS,

Personal Author(s):

Deirmendjian, D

Report Date:

Sep 1963

Media Count:

11 Page(s)

Report Number(s):

P2794

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0418037

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLIFIED ANALYSIS OF SKIN FRICTION AND HEAT TRANSFER IN BINARY BOUNDARY-LAYER FLOW,

Personal Author(s):

Li,Ting Y

Report Date:

Sep 1963

Media Count:

65 Page(s)

Report Number(s):

RM-2872-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum presents a simplified analysis of binary boundary-layer flow on a flat plate. A simple computational method previously used by Meksyn has been extended and applied to the present problem. Analytical formulas of skin friction, surface mass transfer, and heat transfer are derived. The effects on skin friction of various parameters, such as P (Prandtl number), L (Lewis number), and molecular-weight ratio, and heat transfer in binary boundary layers are exhibited explicitly in these analytical formulas. The results agree well with more exact numerical calculations. In addition, some interaction of viscosity, heat conduction, and diffusion is exhibited-for example, coupling between recovery temperature and skin friction, and coupling between convective heat transfer and diffusion effects. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417901

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SYSTEMATIC USE OF EXPERT JUDGMENT IN OPERATIONS RESEARCH,

Personal Author(s):

Helmer, Olaf

Report Date:

Sep 1963

Media Count:

9 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) By way of a summary, let me restate as follows: (1) I consider operations research a science, but an inexact one. (2) The operations analyst, as opposed to the pure scientist, emphasizes control rather than understanding. (3) The use of judgment in constructing and applying operations-analytical models is inescapable. (4) Since the use of judgment is a sine-qua-non, such judgment should be as expert and its application as systematic as possible. (5) It would be in the interest of raising the scientific standards of operations research to seek improved methods of identifying and measuring expertness and of employing experts efficiently both solitarily and in groups. (6) In particular, the utilization of groups of experts by consensus techniques, by the Delphi technique, by simulation procedures and operational gaming, should be further refined to the point where they will be generally acceptable as part of the stock-in-trade of operations research. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417335

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A CASE STUDY IN THE ECONOMICS OF INFORMATION AND COORDINATION THE WEATHER
FORECASTING SYSTEM,

Personal Author(s):

Nelson, Richard R

Winter, Sidney G

Report Date:

Sep 1963

Media Count:

34 Page(s)

Report Number(s):

P2788

Report Classification:

Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0418739
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) THE PROGRAMMER IN A CHANGING WORLD.
Personal Author(s):
Ware, Willis H
Report Date:
Sep 1963
Media Count:
1 Page(s)
Report Number(s):
P2793
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the light of current research, it seems certain that the role of the programmer will be a changing one. The computer may obsolete the very professional specialty which it fostered fifteen years ago. We may or may not have the large future demand presently forecast for programmers. In the long run, the demand may be much less than we now predict. Eventually it may turn out that the word "programmer" will be used only to describe a secondary skill that people from a wide variety of professional disciplines will have the skill to use and exploit the digital-2uter as a problem-solving tool as one works in his field of primary training. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417647

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE EFFECT OF RESEARCH AND DEVELOPMENT ON THE ECONOMY,

Personal Author(s):

Nelson, Richard R

Report Date:

Sep 1963

Media Count:

11 Page(s)

Report Number(s):

P2787

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) 28 AD-417 647

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0426906

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC VIABILITY AFTER THERMONUCLEAR WAR: THE LIMITS OF FEASIBLE PRODUCTION,

Personal Author(s):

Winter,Sidney G

Report Date:

Sep 1963

Media Count:

224 Page(s)

Report Number(s):

Rept. no. RM3436PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Preparedness measures that would enhance the short-run survival prospects of the population in the event of a thermonuclear war are of no value if the war would so cripple the nation's economic system that the survivors could not be supported in the long run. This Memorandum treats certain aspects of the question of how, and under what circumstances, the resources that would survive such a war could be used to create an economy capable of supporting the population, maintaining its capital stock, and meeting any other national needs of comparable urgency. The main focus is on the limits imposed on production in the postattack economy by the availability of economic resources and technological conditions of production. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0424688

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AROUND THE WORLD BY MICROWAVE FOR HALF A BILLION DOLLARS,

Personal Author(s):

Martin,L G

Report Date:

Sep 1963

Media Count:

13 Page(s)

Report Number(s):

P2790

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper attempts to place in better perspective a half-billion dollar communications expenditure. It suggests that a worldwide microwave communication system of video capacity might be built for a sum comparable to what has been spent thus far on research and development of communication satellite systems. Major features affecting installation costs are discussed and cost estimates are presented for two hypothetical round-the-world routes. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0421842

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HYDROMAGNETIC SIGNALS IN THE IONOSPHERE,

Personal Author(s):

Field,E C

Report Date:

Sep 1963

Media Count:

44 Page(s)

Report Number(s):

RM3830PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The equations which govern the propagation of hydromagnetic signals in a spatially inhomogeneous, multi-species, anisotropic ionosphere are derived and applied to several situations. Numerical results for

the dependence of the ionospheric refractive indices on height and signal frequency are presented and discussed. Simplified model ionospheres, characterized by the refractive indices, are used to compute the ground-level magnetic signals produced by hydromagnetic waves incident normally from above, upon the collision-dominated lower ionosphere. Magnetic disturbances, which were observed at great distances from the high-altitude Argus nuclear explosions, are considered and are shown to have been probably hydromagnetic in origin. Also, it is shown that, in principle, the ionosphere is capable of supporting hydromagnetic surface waves. The relevant equations for the case of propagation across the geomagnetic field lines are derived and discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425786

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE LIMITATIONS OF A COST-EFFECTIVENESS APPROACH TO MILITARY DECISION-MAKING,

Personal Author(s):

Quade,E S

Report Date:

Sep 1963

Media Count:

12 Page(s)

Report Number(s):

P2798

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0424418

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CUBAN MISSILE CRISIS: AN ANALYSIS OF SOVIET CALCULATIONS AND BEHAVIOR,

Personal Author(s):

Horelick,Arnold L

Report Date:

Sep 1963

Media Count:

60 Page(s)

Report Number(s):

RM3779PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422672

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONCEPT AND MEASUREMENT OF DEMAND FOR RECOVERABLE COMPONENTS,

Personal Author(s):

Cakpbell,Harrison S

Report Date:

Sep 1963

Media Count:

17 Page(s)

Report Number(s):

RM3824PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum concludes: first, that provision should be made in future procedures to broaden the definition of demand for recoverable parts, as suggested herein; second, that the role of command policy in establishing criteria for demand measurement must be understood and made explicit; and third, and perhaps most important, that the present efforts to improve the quality of base-level demand and repair data continue to receive due emphasis and support. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0420821

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE ESTIMATION OF SHORT-RUN DEMAND AND SUPPLY FROM MARKET DATA CONTAINING SEASONAL PATTERNS,

Personal Author(s):

Fishman, George S

Report Date:

Sep 1963

Media Count:

22 Page(s)

Report Number(s):

P2784

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper has been to acquaint economists with the use of spectral analysis as an aid in identifying short-run demand and supply from market data. It has been shown that the seasonal and

purely random components of price and quantity series can allow us to distinguish short-run demand from supply providing that at least one of the components results in a cross-spectral representation whose sign is opposite to those of the remaining components' representations. Our short-run schedules are actually linear combinations of independent processes. In this sense, our analysis of demand and supply differs from the traditional approach in which long-run phenomena are removed and the aggregate remainders are used to estimate short-run demand and supply. Disaggregating the price and quantity processes allows us to take advantage of the greater certainties in prediction associated with the regularly recurring seasonal patterns, as compared with the purely random processes whose means are the best estimates to be used in prediction. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0420084

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON RANDOM WALKS WITH A REFLECTING BARRIER,

Personal Author(s):

Port,Sidney C

Report Date:

Sep 1963

Media Count:

17 Page(s)

Report Number(s):

RM3597 IPR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The main result is to demonstrate that every recurrent random walk with the origin a reflecting barrier has the strong ratio limit property. This result is then used to obtain information about the

solutions to the Wiener Hopf Equation and to study the first passage times to a half line for random walks on the entire line. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0419768

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE EMERGENT GENIE,

Personal Author(s):

Kramish, Arnold

Report Date:

05 Aug 1963

Media Count:

23 Page(s)

Report Number(s):

P2777

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Several steps to control the proliferation pattern are: (a) The formation of a policy of information control, bilateral and multilateral materials and technological assistance consistent with measures relating to disarmament. (b) The re-examination of our policy on the release of information relating to the peaceful utilization of the atom with the view of making that policy consistent with our mutual defense arrangements. (c) Correction, especially within the academic community and within the weapons laboratories, of the scorn for some early, outmoded technologies of bomb making. (d) Consideration of the control of new technological breakthroughs in limited instances. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0414523

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND THE ANALYSIS OF PROCESSES,

Personal Author(s):

Kalaba,Robert

Report Date:

Aug 1963

Media Count:

23 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Many of the processes considered in modern physics and control theory lead, from the mathematical viewpoint, to nonlinear two-point boundary-value problems. These problems are difficult to treat computationally and analytically. A goal of the theory of invariant imbedding is to provide a systematic technique for converting these boundary-value problems into initial-value problems through use of appropriate variables and the employment of functional equation techniques. A particle multiplication process is considered for illustrative purposes. The classical equations and the invariant imbedding equations are derived and various interconnections are discussed. The paper is intended to be self-contained. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0414793

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET CYBERNETICS TECHNOLOGY: II GENERAL CHARACTERISTICS OF SEVERAL SOVIET COMPUTERS,

Personal Author(s):

Holland, Wade B

Ware, Willis H

Report Date:

Aug 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A short translation introducing the subject of Soviet Computing technology and specifying some areas of computer application considered to be of special importance is presented. The 'Ural' and BESM series of computers are widely known and well covered in the literature. The 'Ural-4' is the most recent member of that series. The BESM-II described would appear to be a modified version of that machine, since the description contained herein does not agree with the bulk of the literature concerning it. The 'Razdan-2' represents a major effort by one of the newer computing centers to pioneer new design techniques. The 'Razdan' series was the first in the Soviet Union to be fully transistorized. Two analog computers, the MN-10 and MN-14, are also described followed by a brief, non-technical article on the Byelorussian 'Luch' computer. The 'EPOS' being built in Czechoslovakia, which, although considerably behind the U. S. and the Soviet states of the art, was being designed for serial production. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0415229

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BRITAIN AND THE ALLIANCE,

Personal Author(s):

DeWeerd, H A

Report Date:

Aug 1963
Media Count:
13 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0414681
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SIMILAR SOLUTIONS OF THE LAMINAR BOUNDARY-LAYER EQUATIONS WITH VARIABLE FLUID PROPERTIES,
Personal Author(s):
Dewey,C Forbes ,Jr
Gross,Joseph F
Report Date:
Aug 1963
Media Count:
31 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Certain numerical solutions to the laminar boundary-layer similarity equations are presented which illustrate the effects of Prandtl number, viscosity-temperature variation, mass transfer, wall temperature, pressure gradient, and hypersonic parameter sigma on the structure of the boundary layer and the derivatives of velocity (shear force) and total enthalpy at the wall. The results show that the common boundary-layer simplifications (such as Prandtl number = 1, viscosity proportional to temperature, zero pressure gradient) often lead to numerical errors of 20 to 50 per cent in the predicted heat transfer, skin friction, and displacement thickness. The shear and enthalpy gradient are shown to depend on the form of the viscosity-temperature relation, the Prandtl number, and the hypersonic

parameter sigma. Results for high surface mass-injection rates at the stagnation point indicate that the shear at the wall does not vanish as in the case of a flat plate. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0414352

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NON-CYCLIC VARIATION DURING QUIET DAYS,

Personal Author(s):

Price,Albert T

Report Date:

Aug 1963

Media Count:

17 Page(s)

Report Number(s):

P2759

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) New methods of studying Sq during the IGY have revealed a clear pattern of the non-cyclic variation field which was not discernible from earlier studies. The field is mainly zonal about the geomagnetic axis, though there are significant departures from axial symmetry. The zonal part corresponds closely to a uniform field plus a dipole field along the geomagnetic axis. The relative values of these two parts accord well with the assumption that the internal part arises from currents induced in the earth by Dst variations. The relationship between the non-cyclic variations and hourly values of equatorial Dst is discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0414525

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) QUASILINEARIZATION, SYSTEM IDENTIFICATION, AND PREDICTION,

Personal Author(s):

Bellman,R

Kagiwada,H

Kalaba,R

Report Date:

Aug 1963

Media Count:

17 Page(s)

Report Number(s):

Memo. RM3812PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An adaptive controller is one which has the capability of learning about unknown aspects of a system being controlled and then modifying its control regime in an effort to improve the quality of the control exerted. A mathematical formulation and computational solution of the problems of system identification and the determination of unmeasurable state variables on the basis of observations of a process, two topics of central importance in the design of adaptive controllers are presented. The approach suggested-based on the theory of quasilinearization-is an outgrowth of continuing RAND research on the computational solution of multi-point boundary-value problems. The paper should be of interest to control engineers and numerical analysts. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0415245

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LENGTH OF THE LAMINAR HYPERSONIC WAKE DURING THE BALLISTIC RE-ENTRY OF A BLUNT OBJECT,

Personal Author(s):

Lykoudis, Paul S

Report Date:

Aug 1963

Media Count:

9 Page(s)

Report Number(s):

P2781

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0412345

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) REVIEW OF THE EARTH AND ITS ATMOSPHERE,

Personal Author(s):

Kellogg, William W

Bates, ED BY D R

Report Date:

Aug 1963

Media Count:

2 Page(s)

Report Number(s):

P2776

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411324

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BRIEF REVIEW OF SIMSCRIPT AS A SIMULATING TECHNIQUE,

Personal Author(s):

Geisler,M A

Markowitz,H M

Report Date:

Aug 1963

Media Count:

21 Page(s)

Report Number(s):

Memo. RM3778PR

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The role of simulation is described and the underlying concepts and structure of SIMSCRIPT by a specific example of a simple job shop routine are presented. The key to developing a more rigorous approach to simulation is to have a SIMSCRIPT view of the world in terms of events, sets, and entities. SIMSCRIPT is a way of design ing and writing down a simulation model, and has been developed with the following objectives: (1) to produce a generalized structure for de signing simulation models; (2) to provide a rapid way of converting a simulation model into a com puter program; (3) to provide a rapid way of mking changes in the simulation model which can be readily reflected in the machine program; and (4) to provide a flexible way of obtaining use ful outputs for analysis. The method is not only an abridged language, but also a structur the help of which a wide class of management problems can be programmed to a computer. It is so designed that whole areas of a problem can be changed without

reprogramming the entire model. SIMSCRIPT streamlines programming and makes it faster and more economical to use. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411835

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GENERALIZED ASSEMBLY SYSTEM,

Personal Author(s):

Mealy,G H

Report Date:

Aug 1963

Media Count:

71 Page(s)

Report Number(s):

RM3646PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The first results of a program of research whose aim is to consolidate and extend the state of the art of computer assembly system design and implementation are presented. Assembly systems are, in a very real sense, the core of the modern programming systems used to prepare problems for calculation of solutions in digital computers. The importance of proper design of assembly systems is especially apparent in the implementation of such large programs as the control programs for SAGE and SACCS. The vehicle for this research has been the Generalized Assembly System (GAS), programmed in an experimental form for the IBM 7090 Data Processing System. This memorandum will be of interest to those concerned with the design and implementation of compilers and assembly systems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0601782

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) URBAN UNDERGROUND HIGHWAYS AND PARKING FACILITIES,

Personal Author(s):

Hoffman,George A

Report Date:

Aug 1963

Media Count:

54 Page(s)

Report Number(s):

RM-3680-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The cost of constructing and operating selected conventional urban highways and their right-of-way cost are plotted over a half-century span. Similarly, the costs of some automobile vehicular tunnels built in this century are also presented for comparison. The operating costs of highways and tunnels are also listed and compared, and those for underground roads are shown to be lower already than those for equal-capacity surface roads. Having deduced from a simple cost comparison that underground urban automotive traffic might not involve much greater costs than surface traffic in the future, and design of future urban highways and parking is investigated, and secondary features and advantages of such systems are enumerated. The conclusions, suggestions, and implications of the study are then discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0413300

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME APPLICATIONS OF POLYNOMIAL APPROXIMATION TO DYNAMIC PROGRAMMING,

Personal Author(s):

Azen,S

Bellman,R

Dreyfus,S

Report Date:

Aug 1963

Media Count:

51 Page(s)

Report Number(s):

RM-3728-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0412346

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TURBULENCE, DIFFUSION, AND GR

Personal Author(s):

Kellogg, W W

Report Date:

Aug 1963

Media Count:

4 Page(s)

Report Number(s):

P2774

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0413068

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ENERGY LEVELS, PARTITION FUNCTIONS AND FRACTIONAL ELECTRONIC POPULATIONS FOR NITROGEN AND OXYGEN ATOMS AS TO 25,000 DEGREES K,

Personal Author(s):

Gilmore,F R

Report Date:

Aug 1963

Media Count:

40 Page(s)

Report Number(s):

RM3748PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Energy levels for N, N(I), N(2), N(3), O, O(I), O(2), and O(3) are tabulated for all possible electronic states or groups of states having two electrons in the n 1 shell, one electron in the n 2 to 8 shell, and the remaining electrons in the n 2 shell. Where experimental values were not available, theoretical estimates were made. The corresponding partition functions and fractional populations for each electronic state of these species were calculated on an IBM 7090 and are reported for 34 temperatures between 1000 and 25,000 K. Alternate partition functions including only electronic states out to n 4 are also tabulated.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0413274

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND THE JACOBI CONDITION OF THE CALCULUS OF VARIATIONS,

Personal Author(s):

Dreyfus,Stuart E

Report Date:

Aug 1963

Media Count:

13 Page(s)

Report Number(s):

RM-3714-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the dynamic programming approach to the calculus of variations, it is usually assumed that a discrete version of an optimization problem approaches the continuous statement as the increment in the independent variable approaches zero. This assumption is examined and a condition that must be satisfied if the passage to the limit is to be valid is discovered. This condition is shown to be equivalent to the Jacobi necessary condition of the classical theory. The exploration of this connection between dynamic programming and the classical theory yields a new form of the Jacobi condition. In its new form, the Jacobi condition is seen to provide a rule for adjusting the optimal solution to take account of slightly perturbed initial conditions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0412843

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SINO-SOVIET ECONOMIC RELATIONS 1958-1962,

Personal Author(s):

Hoeffding, Oleg

Report Date:

Aug 1963

Media Count:

23 Page(s)

Report Number(s):

Memo. RM3787PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The peak in Sino-Soviet trade was reached in 1958-1959, when it accounted for half of China's total trade. It declined heavily in 1960-1962, as did China's trade with Eastern Europe. The decline reflected China's economic crisis as well as the Sino-Soviet conflict. Apart from the recall of Soviet experts in 1960, there is no clear evidence of overt Soviet economic warfare. The USSR exerted severe economic pressure, but did so in the businesslike guise of cutting exports to China, in response to China's reduced ability to pay. However, the USSR has tempered this close-fisted attitude with a few semi charitable gestures. Commercial relations, although visibly strained by the political dispute, have remained formally correct. But the collapse of China's trade with the Bloc, the severe curtailment of imports other than grain from the West in 1961-1963, and poor prospects of obtaining long-term credits in the West have deprived China of the opportunities she had prior to 1960 of harnessing foreign trade to the needs of her industrialization drive. Peking's all round intransigence, for the time being, makes China virtually the only underdeveloped country not receiving economic aid from any source. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0414345

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/414345.pdf

Size: 773 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD414345>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THERMAL RADIATION FROM NUCLEAR EXPLOSIONS

Personal Author(s):

Brode, Harold L

Report Date:

Aug 1963

Media Count:

25 Page(s)

Report Number(s):

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) A description of the explosion phenomena which determine the amount and character of the thermal radiation is presented together with the effects of atmospheric transmission and altitude of burst. The factors governing the response of materials to thermal radiation are outlined, and the nature and extent of large scale fires from nuclear explosions are discussed. The extent of fires caused by the thermal radiation from nuclear explosions is determined by the explosion characteristics, the modifying influences of the atmosphere and transmission through it, and the thermal absorption and combustion nature of the target materials.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417346

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SIGNALS, AMBIGUITY, AND STRATEGIC FORCE STRUCTURE,

Personal Author(s):

Averch, Harvey

Wildhorn, Sorrel

Report Date:

Aug 1963

Media Count:

21 Page(s)

Report Number(s):

P2771

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0415797

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TECHNICAL APPENDIX ON THE SIMSCRIPT SIMULATION PROGRAMMING LANGUAGE,

Personal Author(s):

Hausner, Bernard

Markowitz, Harry M

Report Date:

Aug 1963

Media Count:

15 Page(s)

Report Number(s):

Memo. RM3813PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents material which can be of value in advanced applications of SIMSCRIPT. SIMSCRIPT is a programming language which was especially developed to reduce the time required to initially code and subsequently modify simulation programs. It has been used in the simulation of a wide variety of systems including logistics, manufacturing and computer operations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417654

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROGRAMMER SELECTION REPORT FOR SHARE XXI,

Personal Author(s):

Reinstedt, R N

Report Date:

Aug 1963

Media Count:

14 Page(s)

Report Number(s):

P2782

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422952

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/422952.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD422952>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COUNTER-INSURGENCY: VIET-NAM 1962-1963

Personal Author(s):

Farmer, James

Report Date:

Aug 1963

Media Count:

31 Page(s)

Report Number(s):

P2778

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper describes the political and economic motivating forces in Viet-Nam, the strategic hamlet program, the government organization, and briefly describes the U.S. advisory efforts. It discusses counter-insurgency, particularly the effects on weapons selectivity, the defense, transportation, communication, and offense. Examples from recent experiences in Viet-Nam are given. Patrolling and

Viet-Cong responses to U.S. equipment and tactics are described, as is the role of American technology in counter-insurgency.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417655

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AIDS FOR THE GROSS DESIGN OF SATELLITE COMMUNICATION SYSTEMS,

Personal Author(s):

Northrop, G M

Report Date:

Aug 1963

Media Count:

38 Page(s)

Report Number(s):

P2785

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Efforts were directed towards compiling a computational aid for designers of communication systems employing earth satellites as active relays. It is intended to be of practical utility; there is no suggestion that the theory of communications or satellites is probed in depth or detail. The fundamental underlying this work has been to assimilate in one place most of the nomograms and graphs normally employed in performing the gross design or analysis of a communication system, with emphasis placed on the parametric ranges pertinent to communication satellites. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0427062

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SCATTERING OF ELECTROMAGNETIC WAVES FROM PLASMA CYLINDERS: PART I,

Personal Author(s):

Greifinger, Phyllis

Report Date:

Aug 1963

Media Count:

33 Page(s)

Report Number(s):

RM3573ARPA

Contract Number:

SD79

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theory of the scattering of electromagnetic radiation in the transverse magnetic mode by infinite plasma cylinders with radially varying electron-density distributions is reviewed. Techniques for calculating the scattering cross section are described, with special emphasis placed on short wavelength scattering. Specific calculations of the back-scattering (radar) cross section are made in the geometrical-optics limit and in the Born-approximation limit for several monotonically decreasing electron-density distributions which have zero slope on the cylinder axis. The radar cross section in the region of transition from underdense to overdense plasma is programmed and computed on the IBM 7090 for a Gaussian and for a quadratic electron distribution for wavelengths equal to $1/10$ and $1/100$ of the cylinder radius. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0428584

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONFLICTS IN SOVIET PARTY-MILITARY RELATIONS. 1962-1963,

Personal Author(s):

Kolkowicz,Roman

Report Date:

Aug 1963

Media Count:

49 Page(s)

Report Number(s):

RM3760PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this Memorandum, which has been prepared from open sources, is to describe and analyze a recent phase of the perennial conflict between the Soviet Communist Party leadership and some sectors of the Soviet military establishment. The basic issues of the conflict are: (1) resistance by officers who emphasize the importance of conventional forces to the strategic formulas announced by Khrushchev in January 1960, which discriminate against their interests; and (2) a concerted effort by the Party to force its views on the military through intensified political controls and intimidation. The study stresses the effect of the Cuban crisis on this ongoing conflict of interests, which seems to have exacerbated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0416252

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SATELLITE LIFETIMES IN NEARLY CIRCULAR ORIBTS FOR VARIOUS EARTH-ATMOSPHERE MODELS,

Personal Author(s):

Rowell,L N

Report Date:

Aug 1963

Media Count:

31 Page(s)

Report Number(s):

RM-3700-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The effects on Earth-satellite lifetimes of alti tude, orbit-plane inclination, and perturbation forces for close-in, nearly circular orbits were investigated. The lifetimes of two large, heavy satellites were studied. Studies of orbits with initial altitudes of from 75 to 150 n mi show that satellite lifetime increases significantly as the orbit-plane inclination increases toward 90 deg, and that the ratio of change in lifetime to change in orbit-plane inclination increases as the orbital altitude increases. Satellite lifetimes based on an oblate atmosphere model are significantly greater than those based on a spherical atmosphere model for nonequatorial satellites. The combined gravitational attrac tions of the Moon and Sun cause only negligible vars in the lifetimes of the satellites studied. The Earth's gravitational field does not directly affect lifetimes but produces orbital motions which, when combined with the atmospheric drag forces, can produce considerable changes in satellite lifetimes. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0416010

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PSYCHIATRIC INTERVIEWING AND MULTISTAGE DECISION PROCESSES OF ADAPTIVE TYPE,

Personal Author(s):

Friend ,Merril

Kurland,Leonard

Report Date:

Aug 1963

Media Count:

9 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The present paper is intended as a prelude to subsequent papers in which we shall describe in detail various simulations of different phases of psychiatric interviewing, and the techniques that can be used to construct these simulation processes. In the following pages, we shall provide a nontechnical lexicon of such fundamental concepts as 'decision process,' 'multistage process,' 'policy,' 'information pattern,' 'adaptive policy,' and 'sequential machine.' (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0416640

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REVIEW AND ANALYSIS OF CUMULATIVE-FATIGUE-DAMAGE THEORIES.

Personal Author(s):

Kaechele,Lloyd

Report Date:

Aug 1963

Media Count:

82 Page(s)

Report Number(s):

Memo. RM3650PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum contains the results of a study of cumulative fatigue damage. It shows that there are certain key assumptions which can be identified in current theories. These assumptions determine general trends in the structural weight required to provide a satisfactory fatigue life when a particular theory is used for fatigue-preventive design of a flight structure. The key assumptions have to do with the way fatigue damage is assumed to occur at different stress amplitudes when they are applied alone and when they are mixed with other stress amplitudes (as is the case in aircraft). (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0415827

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A STATISTICAL DESCRIPTION OF DEMAND PATTERNS EVOLVING THROUGH TIME,

Personal Author(s):

Fishman, George S

Report Date:

Aug 1963

Media Count:

33 Page(s)

Report Number(s):

RM-3704-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) After perusal of sample data, the observation often made about demand is that the variance is large compared to the mean. Periodicities of the sort uncovered here explain this phenomenon. For example, a demand process may be at the peak of a cycle one day and at the trough on another. Personnel at Beale argue that schedules for take-offs and landings determine when an aircraft is available for maintenance, and there fore determine the pattern of removals and replacements. The author is of the opinion that institutional maintenance procedures are indeed responsible for many of the uncovered character istics of demand. The primary contribution of this paper to demand prediction '4 been to show the diverse behavior of demand patterns that may actually exist. Wherever attempts at ex plaining these patterns have been made, it has been done on a purely conjectural basis and, hence, they are really "food for thought" rather than "gospel truths." Future research ers in demand prediction should take account of these apparent diversities in demand. Hopefully they will find appropriate characterizations of the demand patterns then under scrutiny from pilot spectral analyses such as this one. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0650434

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VARIATIONAL PROBLEMS WITH STATE VARIABLE INEQUALITY CONSTRAINTS.

Descriptive Note:

Revised ed.,

Personal Author(s):

Dreyfus,Stuart E

Report Date:

Aug 1963

Media Count:

103 Page(s)

Report Number(s):

P-2605-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The primary interest is the development of analytic and computational results applicable to the optimization of missile or airplane trajectories, the paper is restricted to problems involving one independent variable. The paper considers a problem requiring the determination of a control or decision function that, in conjunction with a set of differential equations of motion dependent upon the control, yields a maximal or minimal value of an objective function evaluated at an unspecified future time T , at which time certain specified final conditions are satisfied. This general problem is called the 'Problem of Mayer' and is one of three completely equivalent formulations of any one-dimensional variational problem. New results are derived concerning the characterization of the optimal solution of a variational problem in which the variables involved are restricted, by an inequality constraint, to lie only in a specified region of space. The computational aspects of this problem lead, in the concluding chapters, to a rather thorough investigation of techniques of numerical solution of unconstrained optimal trajectory problems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410833

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEW ANALYTIC AND COMPUTATIONAL METHODS FOR TREATING NONLINEAR CIRCUITS,

Personal Author(s):

Bellman, Richard

Report Date:

Jul 1963

Media Count:

12 Page(s)

Report Number(s):

RM3719PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A number of new mathematical techniques have been developed to treat various classes of non linear problems. Three theories are discussed here, invariant imbedding, dynamic programming, and quasilinearization, and a selected list of references is presented for further reading in these areas.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0423253

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYMPOSIUM ON THE ROLE OF AIRPOWER IN COUNTERINSURGENCY AND UNCONVENTIONAL WARFARE: THE ALGERIAN WAR,

Personal Author(s):

Peterson,A H

Reinhardt,G C

Conger,E E

Report Date:

Jul 1963

Media Count:

77 Page(s)

Report Number(s):

RM3653PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410877

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME FACTORS BEARING ON SOVIET ATTITUDES TOWARD DISARMAMENT,

Personal Author(s):

Wolfe, Thomas W

Report Date:

Jul 1963

Media Count:

22 Page(s)

Report Number(s):

P2766

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper is intended primarily as a check list and basis for discussion. It sets down a number of possibly relevant factors bearing soviet attitudes toward disarmament under two broad categories, pro and con: First, considerations which, in one way or another, may furnish motivation for a "genuine" Soviet interest in arms control and disarmament. Second, considerations which argue against real Soviet interest in disarmament agreements on any terms that are likely to be acceptable to the West. These are obviously quite arbitrary categories, and there is a large overlapping gray area in which the Soviets may have varying degrees of "genuine" interest in the disarmament issue (e.g., for its political-propaganda value) without necessarily entertaining any serious expectation of actually laying aside their arms. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410861

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Numerical Approach to the Convolution Equations of a Mathematical Model of Chemotherapy.

Personal Author(s):

Bellman, Richard

Kotkin, Bella

Report Date:

Jul 1963

Media Count:

11 Page(s)

Report Number(s):

RM-3716-NIH

Contract Number:

PHS-RG-9608

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The new model of drug distribution in the body incorporates the exchange between the stationary and flowing phases in the large blood vessels. This introduces computationally difficult convolution terms. The method of differential approximation applied to the convolution equations reduces this model to a system of differential-difference equations which can be solved computationally. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411142

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPOUND SIMPLE GAMES II: SOME GENERAL COMPOSITION THEOREMS,

Personal Author(s):

Shapley, Lloyd S

Report Date:

Jul 1963

Media Count:

42 Page(s)

Report Number(s):

Memo. RM3643PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Solutions are given of the compound game that is formed when the players of a given, m-person game are replaced by m committees, each committee having its own special voting rule or other method of reaching a decision. Relationships are established between the solutions of the compound game, on the one hand, and the solutions of the original game and the m committee games, on the other. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411356

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DEVELOPMENT OF BAYESIAN PARAMETERS FOR SPARE PARTS DEMAND PREDICTION,

Personal Author(s):

McGlothlin, William H

Report Date:

Jul 1963

Media Count:

34 Page(s)

Report Number(s):

RM-3699-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410769

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A POSTSCRIPT ON THE SIGNIFICANCE OF THE BOOK SOVIET MILITARY STRATEGY,

Personal Author(s):

Wolfe, Thomas W

Report Date:

Jul 1963

Media Count:

51 Page(s)

Report Number(s):

RM-3730-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The present memorandum was prepared as part of the continuing study of Soviet military doctrine, strategy, and defense policy undertaken for Air Force Project RAND. It follows a previous Memo randum by this author on the Soviet book 'Voennaia Strategiia (Military Strategy)' the first compre hensive work on the subject in the Soviet Union since 1926. The questions to which the present memorandum addresses itself hawn out of a discussion of the Sokolovskii book at a panel on Nuclear War and Soviet Strategy, conducted in Washington, D. C., in April 1963 by the Center for Strategic Studies of Georgetown University. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410474

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/410474.pdf

Size: 7 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD410474>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Velocity Requirements for Stopover Round Trips to Mars

Descriptive Note:

Memorandum rept

Personal Author(s):

Rowell, L N

Report Date:

Jul 1963

Media Count:

48 Page(s)

Report Number(s):

RAND/RM-3474-PR

XC-USAF

Contract Number:

AF49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The velocity increments that are required to transfer a vehicle from an Earth parking orbit to a Mars parking orbit and return are presented for a range of departure dates during the time period from 1971 to 1977. The departure dates fall before and after those for minimum-energy trajectories, i.e. , May 1971, July 1973, September 1975, and October 1977. The parking orbits are circular and are at an altitude of

100 n mi. The required velocity increments are presented primarily in graphic form. The individual and total velocity increments for one-way trips are given for transfer times ranging from 100 to 300 days, in 50-day increments.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0409939

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/409939.pdf

Size: 711 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD409939>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INFORMATION SYSTEMS FOR URBAN PLANNING

Personal Author(s):

Hearle, Edward F R

Report Date:

Jul 1963

Media Count:

21 Page(s)

Report Number(s):

P-2765

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0407498

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/407498.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD407498>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE THERMODYNAMICS OF THE POLYETHYLENE-HYDROCARBON VAPOR SYSTEM

Personal Author(s):

Krieger, F J

Report Date:

Jul 1963

Media Count:

36 Page(s)

Report Number(s):

RM-3709-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The purpose of this study is the thermodynamic investigation of polyethylene over a range of temperatures up to 6000 K and pressures up to 10 to the 6th power atm. Two sets of equilibrium composition equations are used; one representing a pure gas phase, the other a heterogeneous system of gas and solid carbon. The gas phase of the heterogeneous chemical system, like the homogeneous gas phase, comprises 70 gaseous carbon and hydrocarbon species. The results of the computational program are presented in both tabular and graphic form. The latter is a conventional Mollier diagram in

which specific enthalpy is plotted against specific entropy, with cross plots of temperature, pressure, and molecular weight.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422549

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYMPOSIUM ON THE ROLE OF AIRPOWER IN COUNTERINSURGENCY AND UNCONVENTIONAL WARFARE: THE MALAYAN EMERGENCY,

Personal Author(s):

Peterson,A H

Reinhardt,G C

Conger,E E

Report Date:

Jul 1963

Media Count:

89 Page(s)

Report Number(s):

RM3651PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0407563

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/407563.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD407563>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE THERMODYNAMICS OF THE POLYSTYRENE-HYDROCARBON VAPOR SYSTEM

Descriptive Note:

Memorandum

Personal Author(s):

Krieger, F J

Report Date:

Jul 1963

Media Count:

35 Page(s)

Report Number(s):

RM-3708-PR

XC-AFRDC

Contract Number:

AF49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A study was conducted on the thermodynamic properties of polystyrene over a range of temperatures up to 6000 K and pressures up to 10 to the 6th power atmospheres. Two sets of equilibrium composition equations are used; one representing a pure gas phase, the other a heterogeneous system of gas and solid carbon. The gas phase of the heterogeneous chemical system, like the homogeneous gas phase, comprises 70 gaseous carbon and hydrocarbon species. The results of the computational program are presented in both tabular and graphic form. The latter is a conventional Mollier diagram in which specific enthalpy is plotted against specific entropy, with cross plots of temperature, pressure, and molecular weight.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410230

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/410230.pdf

Size: 777 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD410230>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME TYPES OF OPTIMAL CONTROL OF STOCHASTIC SYSTEMS

Personal Author(s):

Dreyfus, Stuart E

Report Date:

Jul 1963

Media Count:

36 Page(s)

Report Number(s):

RM-3726-PR

XC-AFRDC

Contract Number:

AF-49-638-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The optimal control of stochastic systems is considered. Under various assumptions concerning the information available to the controller, different optimal control rules result. For certain specific problems, the different control schemes are analyzed and compared, and the vast superiority of feedback over open-loop control is demonstrated.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410585

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ROLE OF THE SOVIET MILITARY IN DECISION-MAKING AND SOVIET POLITICS,

Personal Author(s):

Wolfe, Thomas W

Report Date:

Jul 1963

Media Count:

19 Page(s)

Report Number(s):

P2767

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper takes a brief look at some aspects of the perennial question of the role of the military in Soviet policy formulation, in light of various recent developments including publication of the Sokolovskii book Military Strategy and post-publication Soviet dialogue relative to Party-military relations. In discussing the role the Soviet military may play in the policy arena, it may be useful to distinguish among three main areas or levels at which military influence on Soviet policy comes into play, at least potentially. These are: (1) the area of state policy; (2) the area of strategy formulation; and (3) the area of internal political author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411864

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MATHEMATICAL MODEL OF RADIATION AND POPU- LATION OF CELL COLONIES. I. TWO-
DIMENSIONAL RANDOM-WALK MODEL,

Personal Author(s):

Bellman,Richard

Elkind,Mortimer

Kotkin,Bella

Report Date:

Jul 1963

Media Count:

1 Page(s)

Report Number(s):

Memo. RM3665NIH

Contract Number:

RG9608

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) To study the effect of radiation on the popu lation of cell colonies a simple model is constructed that follows a cell through a two dimensional random walk, where one dimension represents state of growth and the other represents state of health or number of sites damaged. The cell is subjected to radiation exposure at prescribed times and doses which can be varied. The cell will eventually either divide or become sterile. An IBM 7090 FORTRAN program of the Monte Carlo procedure presents a statistical summary of results at the absorbing barrier. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0419396

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYTICALLY SOLVABLE MODEL FOR THE ELECTROMAGNETIC FIELDS PRODUCED BY NUCLEAR EXPLOSIONS,

Personal Author(s):

Sollfrey, W

Report Date:

Jul 1963

Media Count:

19 Page(s)

Report Number(s):

RM-3744-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A theoretical expanding electromagnetic field structure analogous to that produced by a nuclear explosion is presented. The model displays time-and-space varying conductivity and current, but can be solved analytically. There are certain long-time nonphysical effects, but the fields are plausible for an interesting portion of the time scale. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0413376

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A NEW METHOD OF FREQUENCY SYNTHESIS,

Personal Author(s):

Lindholm, C

Johnson, S

Report Date:

Jul 1963

Media Count:

33 Page(s)

Report Number(s):

RM3756PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

CD-413 376

Abstract:

(U) A number representation scheme is described which can be applied to frequency synthesizers such as are used in communication transmitters and receivers. The scheme permits a very large number of frequencies to be constructed from a much smaller set of fundamental (basis) frequencies. This approach may be applied to a variety of different communication requirements, such as airborne or portable equipment where weight or volume limitations are important, and wideband (spread spectrum) techniques. In the latter field the basis frequencies may be generated by other synthesis techniques, but mixed by the methods shown here. A distinction between nonlinear mixers and linear modulators for summing frequencies is described, and it is noted that for ease of separation of spurious products the linear modulator appears more desirable. Finally, the mathematical basis for the number representation scheme is described and tables useful to the design engineer are included, covering most cases of estimated practical value. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0413102

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ARE CITIES HERE TO STAY,

Personal Author(s):

Hearle, Edward F R

Report Date:

Jul 1963

Media Count:

14 Page(s)

Report Number(s):

P2764

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Cities not only will endure, they will expand, and so will the problems of moving people and goods within and between them. Today I should like to examine the growth of cities in three dimensions: facts - how have cities changed since World War II; future - what forecasts can we make concerning the character of cities a decade or two hence. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0418191

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ' 'INTERZONAL TRADE' ' IN GERMANY. PART I: THE TRADE AND THE CONTRACTUAL RELATIONS,

Personal Author(s):

Mendershausen,Horst

Report Date:

Jul 1963

Media Count:

43 Page(s)

Report Number(s):

RM-3686-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The present paper outlines the subject, provides statistical guides, and indicates the framework in which trade takes place today, after almost fifteen years of experience. It describes the constraints that have been imposed on the trade and some of the recent efforts to loosen them; and it suggests some of the problems concerning the effectiveness of these constraints, or their manipulation, on the behavior of the East German regime, e.g., special business interests in West Germany, the attitudes of business firms and governments in other Western countries, the ability of East Germany to deter or counter pressures on its crisis-ridden economy by resort to Soviet resources or to direct pressures on West Berlin. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0413070

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/413070.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD413070>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) REVIEW OF PHYSICAL PROCESSES IN HYPERVELOCITY IMPACT AND PENETRATION

Descriptive Note:

Memorandum rept.

Personal Author(s):

Bjork, Robert L

Report Date:

Jul 1963

Media Count:

61 Page(s)

Report Number(s):

RM-3529-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Research was conducted on hypervelocity impact. Applications of the results were made to the problems of the meteoroid hazard, satellite vulnerability, and ICBM defense Some new information in this area is reported and some of the earlier work is compared with recent experimental data.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0413143

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DECENTRALIZED RESOURCE ALLOCATION WITH A MODICUM OF INCREASING RETURNS,

Personal Author(s):

Marglin,Stephen A

Report Date:

Jul 1963

Media Count:

76 Page(s)

Report Number(s):

RM-3421-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem explored in this essay is the possibility of decentralizing the allocation of inputs among many producers, endowed by nature with different production functions, in order to maximize the output of a single commodity. The results described extend in some respect the range of technologies to which decentralized allocation procedures can, at least conceptually, be applied. The particular decentralized allocation scheme explored is a formalized version of the Lange-Lerner algorithm, in which the ministry of production announces a trial price for each input and producers demand quantities of inputs to maximize shadow profits at the announced trial price vector. The vector is revised by changing its components in proportion to the excess demands (that is, total demands minus supplies) resulting from profit maximization at the announced prices. The process is repeated in the hope of reaching a price vector which is an equilibrium set of prices in the sense that the sum of producers' profit-maximizing demands just equals supplies, so that every producer is at a position from which he has neither incentive nor need to move; for such an equilibrium always represents an optimal allocation of inputs. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0415038

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ARMY COST MODEL PROGRAMMERS' REFERENCE MANUAL,

Personal Author(s):

Baker, C L

Report Date:

Jul 1963

Media Count:

170 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum presents detailed information, which, in addition to the program listing, is necessary to programmers working with the Army Cost Model. The Army Cost Model is programmed in

the language of the RAND-SOS Operating System for the IBM 7090, operating under the control of the MocDonald Monitor. Machine operating instructions are also included. The program documentation analysis is presented, providing facility to alter the program, effect major reprogramming, or trace the program's flow. The bulk of the Memorandum is in the Appendices, which cross-reference the assembly listing, outline the various routines, present the input sheets and examples of the output format, and provide flow charts of routines. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411643

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET BLOC ECONOMIC INTEGRATION: SOME SUGGESTED EXPLANATIONS FOR SLOW PROGRESS,

Personal Author(s):

Neuberger,Egon

Report Date:

Jul 1963

Media Count:

24 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum represents an attempt to explain the relatively slow progress in economic integration in the Soviet Bloc. Some of the major factors impeding successful economic integration in the Soviet Bloc are: (1) the attempt by each Eastern European country to protect its national sovereignty, (2) the existence of strong vested interests in each country in the form of nationalized industries, (3) the need to take positive actions in planned economies in order to achieve integration rather than relying merely on the removal of artificial barriers, (4) the very great differences in the levels of economic development of the various member countries, (5) the desire for autarky, (6) the ideological preference for heavy industry in each country, and (7) the absence of economic tools necessary for achieving a rational division of labor. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0412816

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANOMALOUS SOUNDS AND ELECTROMAGNETIC EFFECTS ASSOCIATED WITH FIREBALL ENTRY,

Descriptive Note:

Research memo.,

Personal Author(s):

Romig, Mary F

Lamar, Donald L

Report Date:

Jul 1963

Media Count:

1 Page(s)

Report Number(s):

RM-3724-ARPA

Contract Number:

SD-70

ARPA Order-189-61

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problems of the nature and origin of certain hissing sounds and electromagnetic effects associated with the passage of very bright meteors or fireballs has long been of interest to meteor astronomers. This Memorandum describes these effects and discusses their possible origin from the standpoint of atmospheric electricity and re-entry physics. This study was motivated by the possibility that a better understanding of these phenomena will lead to new techniques for determining the size, nature, and path of any large body entering the earth's atmosphere. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411981

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MODELS FOR ECONOMIC DEVELOPMENT,

Personal Author(s):

Moore, Frederick T

Report Date:

Jul 1963

Media Count:

44 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0421500

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INFLUENCE OF SPACE TECHNOLOGY ON HEMISPHERIC DEFENSE: AN INTER-AMERICAN DEFENSE
COLLEGE LECTURE,

Personal Author(s):

BUCHHEIM,R W

Report Date:

Jul 1963

Media Count:

35 Page(s)

Report Number(s):

RM3681PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411644

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPLETELY COHERENT SEQUENTIAL DETECTION WITH APPLICATION TO SEARCH RADAR,

Personal Author(s):

Kendall, William B

Report Date:

Jul 1963

Media Count:

56 Page(s)

Report Number(s):

RM3757PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This study provides the first accurate results for sequential detection at high input signal to-noise ratios, which is the area in which sequential detection search radars are most efficient. The results are useful in evaluating sequential detection systems, the use of which permits search radars to operate with less average power without loss of performance. Thus, the study should be of interest to those concerned with the design or evaluation of search radar systems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411807

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PLASMA RESONANCE IN INCOHERENT SCATTERING OF RADIO WAVES FROM A FULLY IONIZED PLASMA,

Personal Author(s):

Gilinsky,Victor

DuBois,Donald

Report Date:

Jul 1963

Media Count:

17 Page(s)

Report Number(s):

RM-3696-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The detail- shape of the plasma resonance in the spectrum of radio waves incoherently scattered from a hot plasma is presented. The calculation includes exactly the lowest order effects of close collisions in the limit of long wavelength of the radiation and high plasma temperature. However, the results are applicable to some experiments to be performed on incoherent scattering of radar beams from the ionosphere. The magnetic field is neglected but this is a good approximation at high frequencies. The effect of collisions with neutral atoms has also been neglected and this restricts the validity of the results to altitudes above 200 km. A diagrammatic description of electrical interactions of charged particles is used and a weakly coupled, high-temperature plasma in thermodynamic equilibrium is assumed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411839

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/411839.pdf

Size: 613 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD411839>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE CASE OF A PURE PUBLIC GOOD: TELEVISION BROADCASTING

Personal Author(s):

Minasian, Jora R

Report Date:

Jul 1963

Media Count:

19 Page(s)

Report Number(s):

P-2773

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Broadcasting is a public good only insofar as it stimulates widespread public interest, including children and economists. It is only public good by definition, but not by virtue of analysis based on technical economic factors, if it is meant that broadcasting automatically calls forth the 'vexing problem of collective expenditure.' On technical grounds, I do not see any necessity for either a purely commercial ('free' reception), nor purely subscription television arrangement; after all, a coexistence policy is a distinct possibility. If the station 'owners' had the 'property rights' which did not restrict them

to commercial transmission, broadcasting might, in fact, consist of both some subscription system and commercial sponsorship which may represent a utilization of the scarce resources. The creation of additional value through utilization of resources is the true costs which have been inflicted on the society by virtue of the restriction of pay television arrangement.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0412288

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VALIDATING MAINTENANCE POLICIES AND ESTIMATING LAUNCH CAPABILITY FOR BALLISTIC MISSILES,

Personal Author(s):

Kamins,Milton

Report Date:

Jul 1963

Media Count:

29 Page(s)

Report Number(s):

RM3645PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum is part of a long-term study of maintenance policies and their effect on Air Force capabilities and costs. Using a methodology developed at RAND some time ago, (AD-247 383), this Memorandum suggests a means of maximizing the readiness posture of the ICBM force. The procedure suggested can be used to determine the appropriate frequency for a variety of scheduled maintenance activities on systems (particularly large missiles) that are normally inert and are not verified by a regular flying program. The methodology should be of considerable interest and use to persons responsible for specifying scheduled maintenance requirements for nearly all unmanned weapon systems, whether

under the responsibility of support (AFLC and AFSC) or operating commands, and whether in the development, acquisition, or operational phase. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411222

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PERFORMANCE OF THE BIASED SQUARE-LAW SEQUENTIAL DETECTOR IN THE ABSENCE OF SIGNAL,

Personal Author(s):

Kendalla, William B

Report Date:

Jul 1963

Media Count:

25 Page(s)

Report Number(s):

RM3759PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) G. E. Albert's general sequential test for making one of r distinct decisions about a distribution function $F(x_i \text{ given } x_{(i-1)})$ by observing a sequence of x_i 's is presented, and his results, which give the performance of this test as the solutions of integral equations, are stated. These equations are then used to treat the incoherent detection of a sinewave in Gaussian noise by a biased square-law detector. This detector uses samples y_j of the envelope of the received waveform to calculate the sums x_k times the summation between i and $j-1$ of $((y_j)^2 - \text{bias})$, $i = 1, 2, \dots$, and sequentially compares the x_i to holds until an x_i less than the lower threshold B or greater than the upper threshold A is found. Then if x_i less than or equal to B it is decided that the signal is not present (dismissal), and if A less than or equal to x_i it is decided that the signal is present (alarm). For y_j having the Rayleigh probability distribution $f(y) = y \exp(-y^2)$

divided by 2), i.e., for the received waveform consisting of Gaussian noise alone, exact solutions are obtained for the probability of (false) alarm and for the average test duration. These solutions are unique in that they involve no approximations. Curves of the probability of false alarm versus the upper threshold A , and of the average test duration versus the expected input signal-to-noise ratio are presented. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0661558

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON LAGRANGE MULTIPLIERS.

Descriptive Note:

Revised ed.,

Personal Author(s):

Kao,R C

Report Date:

Jul 1963

Media Count:

13 Page(s)

Report Number(s):

P-2713-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The note is devoted to an intrinsic (i.e., geometric) characterization of these multipliers and a natural reformulation of the equilibrium conditions that permits a better insight into the nature of constrained extremum problems in economics.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0408551

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/408551.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD408551>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OCEAN-CURRENT MODELS USING POTENTIAL VORTICITY

Personal Author(s):

Blandford, Robert R

Report Date:

Jun 1963

Media Count:

89 Page(s)

Report Number(s):

RM-3156-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Two-layer and continuous models of the Gulf Stream and one-layer and continuous models of the Cromwell Current, respectively, are developed from theoretical considerations. Numerical results obtained from computer solutions of these models are compared with observed data and are found to show reasonably good agreement. The limitations of the modeling are set forth.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0419474

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/419474.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD419474>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE POLITICAL EFFECTS OF MILITARY PROGRAMS: SOME INDICATIONS FROM LATIN AMERICA

Personal Author(s):

Wolf, Jr, Charles

Report Date:

Jun 1963

Media Count:

43 Page(s)

Report Number(s):

RM-3676-ISA

XD-OASD/ISA

Contract Number:

SD-79

Monitor Series:

OASD/ISA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Contents: Some Views of Political-Military Inter actions; The eroion- of-democracy view, The support-for-authoritarianism view. Testing the Hypotheses with Latin American Data; The data, Military aid and level of democracy, Military aid and change in political level, Defense expenditures and political level, Defense expenditures and change in political level.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0408943

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/408943.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD408943>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN AGGREGATE BASE STOCKAGE POLICY FOR RECOVER ABLE SPARE PARTS

Descriptive Note:

Research memo.

Personal Author(s):

Feeney, G J

Petersen, J W

Sherbrooke, C C

Report Date:

Jun 1963

Media Count:

49 Page(s)

Report Number(s):

RM-3644-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This memorandum describes the initial results of a digital computer program that considers repair characteristics and unit cost by item in the computation of item stock levels. These levels will achieve a specified aggregate base fill rate across all recoverable items with the least dollar investment in base recoverable inventory. The test consisted of taking demand data for a sample of 2802 recoverable items at Andrews Air Force Base and using the first six months of data as model input to compute item stock levels required to achieve a range of aggregate base fill rates. Demands for these items for the next six months were then compared with these stock levels. It was found that the actual fill rates differed by less than 5 percent from the target fill rates that had been used in setting the stock levels. The most important result of the present study is the method which uses both repair characteristics and unit cost to analyze stock requirements across a large group of items.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0453449

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE LOGIC THEORY MACHINE: A MODEL HEURISTIC PROGRAM,

Personal Author(s):

Stefferud,Einar

Report Date:

Jun 1963

Media Count:

187 Page(s)

Report Number(s):

RM 3731 CC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum contains a highly detailed program listing for the Logic Theory Machine (LT), a computer program written in Information Processing Language-V (IPL-V), and developed especially for

use as a pedagogical model. The text portions of the Memorandum expand upon the documentation in the listing, tracing program flow, analyzing routines utilized, and providing insight into the structure and the development of the program. LT was originally programmed in an early version of IPL by Newell, Shaw, and Simon to derive proofs of logic expressions in the sentential calculus of Whitehead and Russell. In rewriting the program for use as a teaching aid, a new method of replacement on subexpressions has been included, and many minor changes effecting improvements in clarity have been incorporated. Features of the code that were unjustifiably hard to explain have been simplified. The Memorandum defines LT's activity in terms of problem solving, and then a representation of the defined problem is given in terms of IPL-V. Finally, what LT does is discussed in terms of process hierarchies which operate on the lists structure representations of logic expressions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0408944

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/408944.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD408944>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE MOTION OF ELECTRONS IN A RADIOFREQUENCY FIELD

Personal Author(s):

Romig, Mary F

Report Date:

Jun 1963

Media Count:

50 Page(s)

Report Number(s):

RM-3364-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The motion of electrons in a radiofrequency field is investigated for a cylindrical geometry and an electromagnetic-field configuration consisting of a spatially constant axial magnetic field and an azimuthal electric field which varies linearly with distance from the center of the cylinder. This field configuration, which approximates that found in the electrodeless ring discharge near breakdown, has also been suggested as a plasma confinement scheme. When the motion is collisionless, the equations can be solved analytically to show that stable (time-bounded) motion exists for certain values of the ratio of electron cyclotron frequency to applied field frequency. Confinement of the orbits to a region entirely inside the cylinder is completely assured only for those particles which start from rest; in all other cases the maximum radius of extent depends on initial position and velocity. Collisions are qualitatively accounted for in a crude manner by use of the Langevin equation, which includes a drag force due to collisions in the equations of motion.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0408324

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/408324.pdf

Size: 284 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD408324>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANALYSIS OF A NEW FORMALISM IN PERTURBATION THEORY

Personal Author(s):

Brown, T A

Report Date:

Jun 1963

Media Count:

13 Page(s)

Report Number(s):

RM-3734

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A large number of problems of mathematical physics may be reduced to the solution of the equation $u = f + \lambda T(u)$, where T is a linear transformation. A recent proposal to treat such problems by means of continued fractions is reduced to a more tractable method involving series, and demonstrates the convergence of the resulting series over a larger domain than the classical Neumann series.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0408300

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/408300.pdf

Size: 607 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD408300>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AMERICAN AND SOVIET INTEREST IN AIRSHIPS

Personal Author(s):

Hill, L S

Report Date:

Jun 1963

Media Count:

18 Page(s)

Report Number(s):

RM-3698-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Recent expressions of interest in lighter-than air craft are summarized. In particular, certain Soviet recognition of the potential value of the airship as an economical means for carrying bulky cargo is emphasized. This Memorandum should be of interest to those Air Force personnel charged with the responsibility for development of methods and equipment for transporting oversized items. Such facilities must have size and/or weight capabilities considerably exceeding those of current aircraft, yet remain free from high way, underpass, bridge, and tunnel limitations. This Memorandum should also be of interest to those within the Air Force concerned with the determination of new concepts or new and useful applications for existing concepts. Operational planners in other Governmental agencies and contractual establishments may also find this Memorandum of interest.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410445

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/410445.pdf

Size: 4 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD410445>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Studies in Machine Translation: Bibliography of Russian Scientific Articles

Descriptive Note:

Memorandum rept.

Personal Author(s):

Hays, D G

Scott, B J

Harper, K E

Report Date:

Jun 1963

Media Count:

91 Page(s)

Report Number(s):

RAND/RM-3610-PR

XC-USAF

Contract Number:

AF49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This presentation, one of a series on computer applications to language study, is a catalogue of the Russian scientific articles currently available at The RAND Corporation on magnetic tape. The text comprises twelve corpora of physics articles, four of mathematics, seven of astrobotany, and one of cybernetics. Altogether there are 586 articles, totalling 725,921 running words. This paper is of most interest to system and procedure designers who require textual material for research or test purposes.

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0408309

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/408309.pdf

Size: 4 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD408309>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ARMY COST MODEL STRUCTURE AND FLOW

Personal Author(s):

String, Jr, J

Report Date:

Jun 1963

Media Count:

115 Page(s)

Report Number(s):

XD-DOD

Contract Number:

SD-83

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This memorandum describes the computer programs, the coding system, and the major data flows of an Army cost model designed for rapid costing of alternative force structures and the determining of major item requirements. Several appendixes have been included to supplement the text. The total model consists of ten individual computer programs. Each program is individually initiated through a job control card. Five programs are required for the costing process and must be executed in a prescribed sequence. The remaining five programs are concerned with additional output reports and may be executed as desired. The programs consist of highly flexible basic structures that guide the flow of data according to the coding system. Extensive use is made of subroutines to allow facile modification of data flows. All programs are written for the IBM 7090 computer and employ SCAT (SHARE compiler-assembler-translator) for translation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405859

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405859.pdf

Size: 327 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405859>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CONDITIONS FOR A HOMOGENEOUS MIXTURE TO BE IDEAL

Descriptive Note:

Memo.

Personal Author(s):

Shapiro, N Z

Report Date:

Jun 1963

Media Count:

18 Page(s)

Report Number(s):

RAND-RM-3677-PR

XC-AFRDC

Contract Number:

AF(49)-638-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This report considers homogeneous mixtures of three or more chemical species, obtaining conditions for such mixtures to be 'ideal' over some range of chemical compositions. Temperature and pressure are assumed constant. Ideality is shown to derive from the assumption that for each species, the activity of the species depends only on the concentration of that particular species, independently of the concentrations of the other species.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410013

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/410013.pdf

Size: 408 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD410013>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) System Analysis and Urban Planning

Descriptive Note:

Conference paper

Personal Author(s):

Zwick, Charles J

Report Date:

Jun 1963

Media Count:

15 Page(s)

Report Number(s):

P-2754

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The important point is that practitioners in the general arena of urban affairs have not one, but several powerful new tools which should increase significantly their ability to carry out their individual responsibilities. The major objective is to sketch briefly the general characteristics of these new analysis techniques, and in doing this, I will try to show how they can complement your activities.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410151

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/410151.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD410151>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME COMMENTS ON THE IONOSPHERE AND GEOMAGNETISM

Personal Author(s):

Vestine, E H

Report Date:

Jun 1963

Media Count:

47 Page(s)

Report Number(s):

P-2761

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The broad-scale circulation and dynamics of the magnetosphere is discussed in relation to some problems of the ionosphere. The importance of electric fields and charge separations in the production of various localized features of the magnetosphere seems assured. Many of the features discussed may be instructively interpreted in terms of the Chapman and Ferraro theory.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410014

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/410014.pdf

Size: 417 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD410014>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TRANSPORT TECHNOLOGY AND THE REAL WORLD

Personal Author(s):

Heymann, Jr, Hans

Report Date:

Jun 1963

Media Count:

14 Page(s)

Report Number(s):

P-2755

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0412488

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RECENT LAND-USE TRENDS IN FORTY-EIGHT LARGE AMERICAN CITIES,

Personal Author(s):

Niedercorn, John H

Hearle, Edward F R

Report Date:

Jun 1963

Media Count:

37 Page(s)

Report Number(s):

RM3664FF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An examination of changes in the proportions of various types of land in urban use shows that vacant land in the larger American cities is rapidly disappearing. Net land-use densities are declining for population and manufacturing employment; commercial employment densities appear to be approximately constant. Consequently, unless large amounts of vacant land exist inside the city limits, the average large city appears to have nearly reached its upper limits of population and employment in manufacturing and commerce. A full set of the land-use, population, and employment data utilized in the analytical part of this paper are included in the appendixes. The land-use data were collected from the city planning commissions of 48 cities, and both employment and population data are estimates made by the authors. To their knowledge this is the most complete set of city land use, population, and employment data available in a single publication. Consequently, this Memorandum should be of considerable interest to city planners, regional scientists, and others interested in urban problems.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0408947

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/408947.pdf

Size: 746 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD408947>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A SIMPLE METHOD OF DETERMINING THE EFFECT OF REACTOR TEMPERATURE ON CRITICALITY CONDITIONS

Personal Author(s):

Pinkel, B

Leonard, A

Young, G B

Report Date:

Jun 1963

Media Count:

41 Page(s)

Report Number(s):

RM-3089-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) As part of a series of studies designed to simplify reactor analysis for use in engineering evaluations, an analysis is made of the effect of reactor temperature on criticality conditions, and simple relations are obtained for calculating these effects. The buckling (and hence reactor size for criticality) may be expressed as a function of the fission, capture, and scatter cross sections of the reactor materials averaged over the flux spectrum. If these parameter averages are known for one reactor temperature, then the simple relations derived in this study allow computation for other reactor temperatures. A substantial simplification of the analysis results from the assumption that the major part of the influence of reactor temperature comes from the changes in the cross sections and in the values of the flux distribution in the vicinity of thermal energy. Good agreement is obtained between the values computed from the equations and the values obtained from an 18-group machine calculation performed for a series of reactors covering a temperature range from 25 C to 1450 C.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0409938

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/409938.pdf

Size: 439 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD409938>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CIVIL DEFENSE REVISITED

Personal Author(s):

Williams, J D

Report Date:

Jun 1963

Media Count:

12 Page(s)

Report Number(s):

P-2751

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0409533

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/409533.pdf

Size: 686 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD409533>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE EFFECT OF VERTICAL AIR MOTION ON ATMOSPHERIC DENSITY DETERMINATION FROM ROBIN FLIGHTS

Descriptive Note:

Memorandum rept.

Personal Author(s):

Kern, L C

Rapp, R R

Report Date:

Jun 1963

Media Count:

34 Page(s)

Report Number(s):

RAND/RM-3687-PR

XC-USAF

Contract Number:

AF49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) In order to study possible perturbations of the ROBIN density calculations, a consistent set of velocities was computed between 70 km and 38 km for a standard atmosphere using simplified fall velocity equations. Consistency was achieved by iterating the calculations until variations in the drag coefficient produced insignificant changes in the fall velocities. Fall velocities were then computed using an equation that included an arbitrary distribution of vertical atmospheric motions. The resulting fall velocities were used to compute air density, assuming, as in the ROBIN calculations, that there is no vertical air motion. These computations are used to demonstrate the error in density resulting from the neglect of the vertical-motion term. The effect of the vertical motion on the iterative process used to obtain the drag coefficients and on the process used to check the balloon's sphericity is also discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0409521

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/409521.pdf

Size: 4 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD409521>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET CYBERNETICS TECHNOLOGY: I. SOVIET CYBERNETICS, 1959-1962

Personal Author(s):

Ware, Willis H

Holland, Wade B

Report Date:

Jun 1963

Media Count:

96 Page(s)

Report Number(s):

RM-3675-PR

XC-AFRDC

Contract Number:

AF-49-638-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The three most recent volumes of Problems in Cybernetics, a collection of research reports published more or less annually, form the bulk of the Memorandum (Chaps. 3-5). Chapter 1, a translation of an excerpt from the book Philosophic Questions on Cybernetics, points out the growing pains of the new discipline and touches on the effort to reconcile cybernetics with other disciplines which may view its accomplishments and possibilities with skepticism. A detailed consideration of the controversy surrounding the subject is contained in the article in Chap. 2. Chapter 6 presents a typical general survey of cybernetics, written for the non-technician. It defines the principles of design, construction, and use of computers, and analyzes computer applications in national economic planning, the ferrous metal industry, and in transportation. Finally, a brief item, translated from the Czech, presents two cybernetics research projects at the Computing Center of the Ukrainian Academy of Sciences.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0409862

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/409862.pdf

Size: 808 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD409862>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MANAGEMENT CONTROL SYSTEMS

Personal Author(s):

Farmer, James

Report Date:

Jun 1963

Media Count:

30 Page(s)

Report Number(s):

P-2758

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This paper describes management control systems by considering the management functions of control and decision making. These are related to the objective and functions of a management control system. The problem areas of performance measurement, the language barrier between manager and system, and the costs of such systems are described. An introduction to feedback control systems is included as an appendix.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0412561

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SHORT-TERM EFFECTS OF LSD ON ANXIETY, ATTITUDES, AND PERFORMANCE,

Personal Author(s):

McGlothlin, William H

Cohen, Sidney

McGlothlin, Marcella S

Report Date:

Jun 1963

Media Count:

15 Page(s)

Report Number(s):

P2757

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This study describes the short-term effects of administering LSD to normals as measured by pre and one-week-post-LSD tests of anxiety, attitudes, and performance. The hypothesis tested was that LSD would produce a rapid lowering of defenses resulting in (1) lower anxiety, (2) attitudinal changes, particularly in the form of decreased dogmatism and projection of aggression, and (3) increases in certain performance tests of fluency, flexibility, and originality. The samples consisted of 15 experimental and 14 comparison subjects, most of whom were professional research personnel. The hypothesis was generally confirmed for the anxiety and attitude tests, but there were no gains in the performance tests beyond that attributable to practice effect as measured in the comparison group. An attempt was made to determine if certain LSD-induced changes in the word-association test results, as found in a previous study, were retained in the post-LSD period. The results were inconclusive, apparently because of the lack of similarity between the samples of subjects. A larger study is planned using a six-month follow-up period. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0407547

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/407547.pdf

Size: 262 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD407547>

Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) THE LINEAR-LOGARITHMIC PROGRAMMING PROBLEM

Personal Author(s):

Clasen, R J

Report Date:

Jun 1963

Media Count:

16 Page(s)

Report Number(s):

RM-3707-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The algebraic solution of the linear-logarithmic programming problem is developed, derived by means of Lagrange multipliers. Then, two numerical methods for solving the problem are given, one of which is a generalization of a method previously used to solve the chemical equilibrium problem. Convergence was not proven for either of these methods; however, a number of large chemical equilibrium problems were solved using one or both of the methods.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0407323

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /U2/407323.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD407323>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NAVY COST MODEL

Personal Author(s):

Meltsner, A J

Swaine, H R

Report Date:

Jun 1963

Media Count:

99 Page(s)

Report Number(s):

RM-3660-ASDC

XD-OASD-C

Contract Number:

SD-83

Monitor Series:

OASD-C

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The purpose of this briefing is to present a description of the preliminary work on a Navy cost model. This cost model is to be used for rapid cost estimating of alternative forces for use in cost-effectiveness studies and for projecting approximate budget levels. In the initial development of this model, a determination was made as to the kinds of output the model should have. In general, these outputs are to be compatible with those of the OSD programming system. The model is structured to simulate Navy processes in a simplified manner, the structure being based on a study of the organization, policies, and procedures of the Navy. Finally, highly summarized statements of research projects are presented for the over-all model development work.

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0407382

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/407382.pdf

Size: 852 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD407382>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE DYNAMICS OF DISCONTINUITY SURFACES IN GENERAL RELATIVITY THEORY

Personal Author(s):

Edelen, Dominic G B

Thomas, T Y

Report Date:

Jun 1963

Media Count:

36 Page(s)

Report Number(s):

RM-3627-RC

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A system of necessary conditions is obtained for the existence of solutions of the Einstein field equations in the presence of jumps on sigma. These conditions are shown to be expressible in terms of surface tensors and surface tensorial differential systems.

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0407345

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/407345.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD407345>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME TOPICS IN TWO-PERSON GAMES

Personal Author(s):

Shapley, Lloyd S

Report Date:

Jun 1963

Media Count:

48 Page(s)

Report Number(s):

RM-3672-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Several loosely-related essays on the theory of finite, two-person games are presented. The topics covered are: (1) the block decomposition of symmetric games; (2) saddle points in matrices having submatrices with saddle points; (3) generalized saddle points and 'order matrices'; (4) the existence of values in games with almost perfect information; and (5) the nonconvergence of 'fictitious play' in non-zero-sum games. Throughout, there is an emphasis on features of the theory that depend only on the ordering of the payoffs, as opposed to their numerical values.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0406442

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/406442.pdf

Size: 904 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD406442>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RECENT DEVELOPMENTS IN THE SOVIET CIVIL DEFENSE PROGRAM

Personal Author(s):

Goure, Leon

Report Date:

Jun 1963

Media Count:

29 Page(s)

Report Number(s):

RAND-P-2752

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Soviet civil defense program is far from complete and suffers from a variety of shortcomings. Apart from the notorious inefficiency of Soviet administration, there is the relatively short time that many persons will be able to remain in shelters, because of limited food supplies. Great crowding and absence of cooling equipment will force large numbers of them to evacuate their shelters via contaminated areas while the radiation level may still be fairly high. The Soviets recognize that the effectiveness of civil defense, surviving the attack, and winning the war will depend to a great extent on their ability to blunt or weaken the enemy's attack. This is why Soviet doctrine also emphasizes pre-emptive attacks as well as the importance of anti-aircraft and anti-missile defense. Despite the present inadequacies of Soviet civil defense and the growing destructiveness of modern weapons, the Soviet leadership believes that the preservation of the Soviet state and society in the event of a war merits

considerable efforts and the expenditure of relatively scarce money and resources. In the author's opinion, the available evidence leaves no doubt that the Soviet Union is engaged in an extensive civil defense program and that it believes it to be worth further efforts and continued investments.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0406844

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/406844.pdf

Size: 819 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD406844>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RESOURCE ANALYSIS AND LONG-RANGE PLANNING

Personal Author(s):

Novick, David

Report Date:

Jun 1963

Media Count:

26 Page(s)

Report Number(s):

RM-3658-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Program budgeting, cost effectiveness, and cost analysis are terms used with increasing frequency in our military establishment. This memorandum discusses each of the terms, with emphasis on cost analysis, and shows how the concepts that they represent are important for Air FLONG RANGE PLANNING. Since this memorandum is intended primarily for persons who must provide inputs to, as well as use the results of, cost analyses, examples are given of the kind of detailed information required.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0406957

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/406957.pdf

Size: 862 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD406957>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A TEST OF A STATISTICAL METHOD FOR COMPUTING SELECTED INVENTORY MODEL CHARACTERISTICS BY SIMULATION

Personal Author(s):

Geisler, Murray A

Report Date:

May 1963

Media Count:

31 Page(s)

Report Number(s):

RM-3623-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The design and operation of simulation models for studying management policies and other problems that involve complex systems of random variables are being studied. The present text is a companion piece to M. A. Geisler, The Sizes of Simulation Samples Required to Compute Certain Inventory Characteristics with Stated Precision and Confidence, The RAND Corporation, RM-3242-PR, October, 1962. Special statistical methods were used in that study to compute the sample sizes for specified inventory models. In this study, the methods are tested by applying them to particular inventory cases, and determining how well the actual precision and confidence obtained in the estimates agreed with expectation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0406879

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/406879.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD406879>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A SIMPLIFIED MODEL OF THE LAMINAR WAKE OF A HYPERSONIC BODY FOR STUDYING
ELECTROMAGNETIC EFFECTS

Personal Author(s):

Engel, R D

Report Date:

May 1963

Media Count:

50 Page(s)

Report Number(s):

RM-3649-ARPA

XD-DARPA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

DARPA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The simplified model discussed in this paper is applicable to that portion of the re-entry trajectory where the flow may be considered to be inviscid and laminar. This corresponds roughly to a range of altitudes from 180,000 to 250,000 ft. The viscous effects become important above 250,000 ft and the flow is likely to be turbulent below 180,000 ft. In this range of altitudes the model gives results which agree with the numerical results of Feldman. In computing the electromagnetic characteristics of the wake, the air was assumed to be in equilibrium with the local conditions. This assumption is not valid for altitudes much higher than 100,000 ft. Assuming local equilibrium at altitudes above 100,000 ft will provide a lower limit for the actual electron density. At altitudes above 200,000 ft we may assume the flow to be "frozen," and thus compute the electromagnetic characteristics from the stagnation conditions. For the intermediate or transitional altitudes the two limiting cases will serve as upper and lower bounds for the solution.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0402950

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/402950.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD402950>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CONCEPTS AND THEORIES OF PURE COMPETITION

Personal Author(s):

Shapley, Lloyd S

Shubik, Martin

Report Date:

May 1963

Media Count:

39 Page(s)

Report Number(s):

RM-3553-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A classical formulation of the marketplace is examined from three different theoretical view points, and the three solutions that result are contrasted. When the number of participants is small, the solutions are very different, both in their form and in their quantitative predictions. As the size of the market increases, however, they all converge to a common solution, despite the wide disparity in the underlying assumptions.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0402991

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/402991.pdf

Size: 396 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD402991>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) HAVE WE LEARNED ANYTHING FROM TRANSPORTATION STUDIES

Personal Author(s):

Hearle, Edward F

Report Date:

May 1963

Media Count:

12 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0414727

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE NUCLEAR EUROPE MYTH,

Personal Author(s):

Hoag, Malcolm W

Report Date:

May 1963

Media Count:

13 Page(s)

Report Classification:

Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0408083
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/408083.pdf
Size: 2 MB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD408083>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) Notes of Working Symposium on Solar System Constants, Feb 22-26, 1962
Personal Author(s):
Wilson, Donna
Report Date:
May 1963
Media Count:
79 Page(s)
Report Number(s):
RM-3425
XC-AFRDC
Monitor Series:
AFRDC
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0407102

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/407102.pdf

Size: 410 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD407102>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INVARIANT IMBEDDING AND TIME-DEPENDENT SCATTERING OF LIGHT IN A ONE-DIMENSIONAL MEDIUM

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Ueno, Suelo

Report Date:

May 1963

Media Count:

20 Page(s)

Report Number(s):

RM-6603-ARPA

XD-ARPA

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) By means of the invariant-imbedding technique, the integral equations for the reflection and transmission coefficients of radiation in a one dimensional medium are obtained, allowing for the release of absorbed energy with a random time delay. Furthermore, the reflected and transmitted intensities for the fluorescence problem in a one-dimensional medium are expressed in terms of these coefficients, assuming no distribution of emitting sources in the medium.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0408201

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/408201.pdf

Size: 7 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD408201>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ARMY COST MODEL OPERATORS' MANUAL

Descriptive Note:

Memorandum

Personal Author(s):

Pringle, J J

McClenon, P R

Report Date:

May 1963

Media Count:

227 Page(s)

Report Number(s):

RAND-RM-3679-ASDC

XD-OASD-C

Contract Number:

SD-83

Monitor Series:

OASD-C

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The manual is one in a series of publications designed to aid in transferring the capability to operate the Army Cost Model from RAND to other organizations. It covers only the more procedural aspects of model operation and updating. Use of the manual requires, on the part of the cost model operator, an intimate familiarity with all aspects cost model. The manual therefore cannot be used in isolation; it must be used in conjunction with other publications in the series covering data sources and analysis, future research, and model structure and flow.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0407719

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/407719.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD407719>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANALYSIS OF THE DECISION RULES IN DECISION TABLES

Personal Author(s):

Pollack, Solomon L

Report Date:

May 1963

Media Count:

78 Page(s)

Report Number(s):

RM-3669-PR

XC-AFRDC

Contract Number:

AF-49-638-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Decision tables, a framework for describing a set of related decision rules, can improve the communication and documentation achievable by previous techniques such as charting and narrative descriptions of data processing problems, particularly those containing many complex decision rules. In addition, decision tables offer system analysts the potential to eliminate inconsistencies and redundancies in each set of specified decision rules and to produce computer programs that are efficient in the use of computer storage and computer running time. Decision tables also enable the system analyst to determine if he has considered all of the possible decision rules that can be formed from a particular set of conditions. This Memoandum develops for decision tables a theoretical structure that serves as the foundation for achieving these benefits. As background for this development, the author describes a basic structure of decision tables. The theorems developed in this paper provide a basis for system analysts and programmers to verify the logic of their analysis.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0407825

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/407825.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD407825>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THEORETICAL ANALYSIS OF NEAR-FREE-MOLECULE HYPERSONIC FLOW AT THE SHARP LEADING EDGE OF A FLAT PLATE

Personal Author(s):

Charwat, A F

Report Date:

May 1963

Media Count:

70 Page(s)

Report Number(s):

RM-2553-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The initial interactions between a hypersonic free stream and molecules emitted (reflected diffusely) by a cold flat plate immediately downstream of its sharp leading edge are analyzed by near-free-molecule theory. The results give the variations of the pressure, shear, and heat transfer at the wall. These are found to increase downstream from the leading edge and reach a maximum plateau, and a subsequent decay of the wall-transfer properties to continuum boundary-layer values can be inferred. The magnitude and location of this plateau compare well with available viscous pressure interaction data. An indication of the initial growth rate of the disturbed merged layer is also obtained from the analysis. It is found that this region is wedgelike and has a slope of approximately 45 deg for all hypersonic Mach numbers and for wall to- free-stream-temperature ratios of the order of unit.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0407928

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/407928.pdf

Size: 695 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD407928>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SATELLITE LIBRATIONS ON AN ELLIPTIC ORBIT

Personal Author(s):

Schechter, H B

Report Date:

May 1963

Media Count:

33 Page(s)

Report Number(s):

RM-3632-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The first-order effect of orbital eccentricity on the planar tumbling or oscillatory motion of a dumbbell-shaped satellite is discussed. This has been done by assuming that the angular orientation angle ψ can be represented by a power series in eccentricity e , in which the coefficient of the e to the 0 power term was set equal to the circular solution ψ_c available from earlier investigations. The differential equation for the coefficient of the e to the 1 power term is shown to be of an inhomogeneous Mathieu type, the particular solutions of which can be readily obtained if certain weak restrictions are placed on the initial magnitude of the dumbbell's angular velocity. The analysis indicated that the orientation of the satellite in the elliptic orbit can differ substantially from the one determined for the circular orbit. (Author) 8 AD-407 928

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405813

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405813.pdf

Size: 949 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405813>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN OPTIMAL LINEAR FEEDBACK GUIDANCE SCHEME

Personal Author(s):

Dreyfus, Stuart E

Elliott, Jarrell R

Report Date:

May 1963

Media Count:

52 Page(s)

Report Number(s):

RAND-RM-3604-PR

XC-AFRDC

Contract Number:

AF (49)-638-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A theory developing a linear feedback guidance scheme to correct for inflight disturbances of a vehicle during the course of a space mission is presented. The theory is predicated on the use of a nominal optimal trajectory. The scheme consists of a linear combination of: (1) perturbations of the vehicle state from its nominal state; and (2) time-varying gains to determine the control correction required to satisfy the constraints of the trajectory in an optimal fashion. Exact knowledge of the state of the vehicle is assumed. An analysis of numerical results for an idealized rocket trajectory problem shows the linear feedback guidance scheme to be effective over a wide range of chosen perturbations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0406204

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/406204.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD406204>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RADAR ECHO FROM RE-ENTRY VEHICLES

Descriptive Note:

Memorandum

Personal Author(s):

Weil, Herschel

Report Date:

May 1963

Media Count:

53 Page(s)

Report Number(s):

RAND-RM-3251-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The problem of computing the radar echo from re entry vehicles is treated, primarily to indicate what types of radar-return estimates can be made using presently available results from the gas dynamic theory of wakes and from electromagnetic theory. Numerical results for low-frequency reflectivities and radar cross sections are obtained for a particular computed re-entry wake viewed broadside. The resulting radar cross sections, although orders of magnitude greater than the radar cross section of the vehicle with no wake, are smaller than the broadside geometric cross section of the wake region within which the local plasma frequency is greater than the radar frequency. Some specific

electromagnetic problems are outlined, the solution of which would aid in obtaining results better than the crude estimates presently achievable.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405877

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405877.pdf

Size: 496 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405877>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DIFFERENTIAL APPROXIMATION APPLIED TO THE SOLUTION OF CONVOLUTION EQUATIONS

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Kotkin, Bella

Report Date:

May 1963

Media Count:

17 Page(s)

Report Number(s):

RM-3601-NIH

XJ-NIH

Contract Number:

RG-9608

Monitor Series:

NIH

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) In their work on the construction of mathematical models to aid in the study of physiological processes connected with cancer chemotherapy, the authors have encountered convolution equations that may present severe computational difficulties due to the storage requirements for their solution. The authors present a new approach to this problem, using the technique of differential approximation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405561

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405561.pdf

Size: 840 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405561>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Position of Prepositional Phrases in Russian

Descriptive Note:

Memo.

Personal Author(s):

Harper, Kenneth E

Report Date:

May 1963

Media Count:

24 Page(s)

Report Number(s):

RAND-RM-3625-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A problem frequently encountered in the automatic parsing of Russian texts is the correct structuring of prepositional phrases in sentences. Studies of text samples indicate that, when other criteria are absent, the syntactic governors of prepositions can be determined with a high degree of accuracy by reference to the relative position and part-of-speech of elements in the clausal environment.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405473

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405473.pdf

Size: 751 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405473>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) IMPROVING THE QUANTIZATION OF RANDOM SIGNALS BY DITHERING

Descriptive Note:

Memo.

Personal Author(s):

Furman, G G

Report Date:

May 1963

Media Count:

41 Page(s)

Report Number(s):

RAND-RM-3504-PR

XC-AFRDC

Contract Number:

AF (49)-638-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A numerical solution to the practical problem of determining the effects of independent quantizer activators called dithers upon the statistical processing properties of the quantizer is presented. For the highly important sinusoidal and sawtooth dithers exact analysis yields for the first time answers, as functions of dither amplitude, to the question of what upper bounds does the dither impose on the following: (1) correlation between the quantizer input and quantization noise, (2) value of the noise mean square, and (3) fidelity in the transmission of the mean square, mean fourth and other even moments of the input. The above information, which also comprises a theorem for the quantization of sinusoids and sawtooths, indicates that the rarely used saw tooth is superior to the sinusoid.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405556

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405556.pdf

Size: 647 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405556>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRELIMINARY DESIGN OF MARS BASING

Personal Author(s):

Bliss, Percy H

Report Date:

May 1963

Media Count:

23 Page(s)

Report Number(s):

RAND-P-2747

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This paper is an attempt to focus attention on the design and construction problems for a Martian base. An immediate, prefabricated, inflatable shelter is proposed for the first crew that lands on Mars which will serve for headquarters while additional base construction is performed. The use of indigenous materials for structures is proposed where possible to reduce transportation and construction costs. Prefabricated structures are advocated from imported materials, using steel, aluminum, wood, wood products, plastics, rubber fabrics or polyurethane plastics. Block construction could be used with either imported cements or with blocks and cements manufactured from Martian materials. The design and construction of basing facilities on Mars appears to be within the limits of present technologies, but it is emphasized that designs proposed herein will probably require considerable modification as more information about the environment and available materials on Mars is obtained.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405565

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405565.pdf

Size: 891 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405565>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET PHILOSOPHY, SCIENCE AND CYBERNETICS

Personal Author(s):

Krieger, F J

Report Date:

May 1963

Media Count:

27 Page(s)

Report Number(s):

RM-3619-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Marxist-Leninist ideology is founded on a doctrinal edifice that consists of two parts: dialectical materialism and historical materialism. Dialectical materialism is both a theory of reality, or world-outlook, and a methodology; it is allegedly based on the evolution of the natural sciences and affirms the continuous transformation of matter and the dynamic interconnectedness of things and concepts. Historical materialism is the associated theory of society and deals with the problems of ethics, aesthetics, and the philosophies of history and law. That Marxism-Leninism is not a science follows from the fact that it does not satisfy the three essential conditions of a science: (1) that it be based on experience; (2) that it be presented in a logical and coherent way; (3) that it be open to free criticism and readjustment or rejection if further facts demand it. Marxism Leninism does not satisfy any of these conditions. It is not based on experience; rather, it is proposed as an priori dogma derived from the inviolable classics of Marx, Engels, and Lenin. It is not logically organized. It rejects free criticism and believes itself to be eternal and unchanging.

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0405811

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405811.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405811>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) USE OF EXTRATERRESTRIAL RESOURCES FOR MARS BASING

Personal Author(s):

Steinhoff, Ernst A

Report Date:

May 1963

Media Count:

23 Page(s)

Report Number(s):

RAND-P-2746

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The establishment of exploratory bases on the Moon and Mars will lead to complex logistics, if all supplies have to be provided from the Earth. Use of regeneration techniques to recover water and oxygen, and hydroponic gardening to grow food can reduce the logistics requirements. A further drastic reduction of space transportation costs can be achieved by using lunar and planetary resources for the local production of water, which together with its decomposition products represents over 90% of all the logistic needs of humans and which can also satisfy rocket propulsion needs for spacecraft if used in its dissociated state and liquefied form as LH2 and LO2. The use of locally-produced fuels will drastically change the operating modes. Locally produced chemical compounds suitable as fuels for spacecraft and extraterrestrial surface and flight vehicles or as nutrients for the local production of food and for the

photosynthetic regeneration of oxygen are discussed. The early prototype development of mining, processing and regeneration equipment for the above purposes is encouraged.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0404538

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/404538.pdf

Size: 4 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD404538>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RESEARCH AND DEVELOPMENT IN THE COMMON MARKET VIS-A-VIS THE U.K., U.S., AND U.S.S.R

Personal Author(s):

Kramish, Arnold

Report Date:

May 1963

Media Count:

146 Page(s)

Report Number(s):

RAND-P-2742

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0406437

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/406437.pdf

Size: 120 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD406437>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DISSEMINATORS OF ENMITY

Personal Author(s):

Magnus, Anita

Report Date:

May 1963

Media Count:

5 Page(s)

Report Number(s):

P-2749

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A partial summary and translation of an article by Leonid Velichanskii in the Literaturnaia Gazeta, May 14, 1963, is presented. The article accuses various institutions and organizations of promoting cold war policies and of producing books full of slanderous fabrications about the Communist party and people.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411582

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/411582.pdf

Size: 315 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD411582>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EXISTENCE AND UNIQUENESS THEOREMS IN INVARIANT IMBEDDING. II. CONVERGENCE OF A NEW DIFFERENCE ALGORITHM

Personal Author(s):

Bellman, Richard

Cooke, Kenneth L

Report Date:

May 1963

Media Count:

19 Page(s)

Report Number(s):

RM-3624-ARPA

XD-ARPA

Contract Number:

SD-79

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The theory of invariant imbedding leads to new types of difference approximations to partial differential equations. To illustrate the type of analysis required to establish the convergence of the solution of one to the solution of the other, we consider the difference approximation $u(x \Delta, y)$ $u(x, y \Delta)$, and the limiting equation $u_x = u_y$.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0408509

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/408509.pdf

Size: 415 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD408509>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GRAVITATIONAL FIELDS OF EARTH MODELS AND THE STRUCTURE OF THE EARTH'S INTERIOR

Personal Author(s):

ObersteLehn, Deane

Report Date:

May 1963

Media Count:

17 Page(s)

Report Number(s):

RM-3642-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The third zonal harmonic (J3) of the earth's potential field, contributes a pear-shaped component to its field configuration. The cause has not been definitely established. In an earlier study, the gravitational fields of earth models were calculated to determine whether the distinct variations in mass

distribution that exist between oceanic and continental crustal blocks could account for the third zonal harmonic. The results obtained from those models led to the construction of a second set of models; the results are presented. The second set of earth models incorporates conventional crustal structures and an uppermost mantle structure based on seismic evidence regarding Gutenberg's low-velocity layer. The depths of isostatic compensation considered were 200 and 300 km. The models produced negative surface-gravity anomalies over continental blocks, whose magnitude increased slightly as depth to compensation increased. Corresponding to the general distribution of oceans and continents, these anomalies are comparable in magnitude and agree in sign with the satellite-derived anomaly.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0414726

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET LIMITED WAR DOCTRINE,

Personal Author(s):

Goure, Leon

Report Date:

May 1963

Media Count:

15 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0406462

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/406462.pdf

Size: 425 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD406462>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AIR CONDUCTIVITY PRODUCED BY NUCLEAR EXPLOSIONS

Personal Author(s):

Karzas, W J

Latter, R

Report Date:

May 1963

Media Count:

20 Page(s)

Report Number(s):

RM-3671-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) In order to determine the electromagnetic field generated by nuclear explosions in the atmospheres essential to specify the explosion induced conductivity of the air in the neighbor hood of the burst point. It is known that this conductivity depends upon the spectrum of the ionized electrons through the dependence of the conductivity on the energy-dependent electron atom collision frequency. The spectrum of the ionized electrons is determined in terms of their source function. With this spectrum, the electron collision frequency, and hence the electronic conductivity per ionized electron, is estimated.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411583

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/411583.pdf

Size: 507 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD411583>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EXISTENCE AND UNIQUENESS THEOREMS IN INVARIANT IMBEDDING. 1. CONSERVATION PRINCIPLES

Personal Author(s):

Bellman, R

Cooke, K L

Kalaba, R

Wing, G M

Report Date:

May 1963

Media Count:

24 Page(s)

Report Number(s):

RM-3611-ARPA

XD-ARPA

Contract Number:

SD-79

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Some of the rigorous aspects of invariant imbedding are discussed: existence and uniqueness of solution, asymptotic behavior over space and time, stability, computational stability, applications to classical boundary-value theory, and so on. An important conservation property, obvious on physical

grounds, is used in establishing the existence of the solution of a matrix Riccati equation without recourse to the associated linear differential equation, and thus with out any appeal to spectral theory.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405460

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405460.pdf

Size: 973 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405460>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROPAGATION OF ACOUSTIC-GRAVITY WAVES FROM A SMALL SOURCE ABOVE THE GROUND IN AN ISOTHERMAL ATMOSPHERE

Personal Author(s):

Pierce, Allan D

Report Date:

May 1963

Media Count:

42 Page(s)

Report Number(s):

RM-3596

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This report discusses the effects of gravity and of the atmosphere's nonuniform density on sound propagation. It is part of RAND's continuing study of the atmospheric waves generated by nuclear explosions. This report should be of interest to agencies and contractors concerned with the detection of nuclear explosions. It should also be of interest to other research workers who are studying low frequency sound propagation in the atmosphere.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0408034

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/408034.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD408034>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE FOUNDATIONS OF RELATIVISTIC ENERGY MECHANICS

Personal Author(s):

Edelen, Dominic G

Report Date:

May 1963

Media Count:

40 Page(s)

Report Number(s):

P-2703

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The Einstein theory of general relativity is shown to yield a general mechanics of continuous media under the assumption that the momentum-energy tensor admits a unique time-like eigenvector. Physical interpretations of the governing equations are derived, together with constitutive relations for general and isotropic materials. It turns out that the mechanics can always be viewed as describing the flow of rest-energy. Invariant requirements for the existence of a stress potential are obtained, the satisfaction of which leads to a decomposition and partial evaluation of the rest-energy. The Einstein field equations are shown to imply the existence and uniqueness of an intrinsic energy density for any material medium (intrinsic immutable mass). The usual procedure of adding conditions to the Einstein theory in order to obtain an analogous intrinsic quantity is thus unnecessary. The path density, which defines the intrinsic energy, is shown to be path independent in an appropriate sense if the stresses admit a stress potential. This suggests a decomposition of the generalized stresses and leads to a fundamental differential relation on the trajectories of the energy flux. Natural definitions of intrinsic temperature and intrinsic entropy density are direct consequences of the fundamental differential relation and lead to generalized thermodynamic descriptions which include the effects of gravitational radiation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410882

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) KREMLIN THOUGHTS: YIELDING, REBUFFING, PROVOKING, RETREATING,

Personal Author(s):

Leites, Nathan

Report Date:

May 1963

Media Count:

29 Page(s)

Report Number(s):

RM3618 ISA

Contract Number:

SD79

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An analysis of Soviet attitudes and self-images towards Western pressures, Western actions, Western reactions to Soviet initiatives is presented. This study addresses itself to Soviet statements on four closely related themes: yielding to enemies, rebuffing enemies, provoking enemies, and retreating before enemies. It attempts to illuminate our understanding of the psychological implications of these themes in the Soviet decision-making process. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0414106

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/414106.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD414106>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A BRIEF SURVEY OF TRAJECTORY, GUIDANCE, AND PROPULSION ASPECTS OF ORBITAL RENDEZVOUS

Personal Author(s):

Schechter, H B

Report Date:

May 1963

Media Count:

57 Page(s)

Report Number(s):

RM-3275-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(688)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Aspects of the problem of orbital rendezvous are reported from a survey of the open literature. The papers studied are discussed briefly, and some of the interesting results and data are compared. Most of the papers can be grouped into either of two classes: The first class tackles the problem from the point of view of impulsive Keplerian orbital transfers; the second class analyzes the terminal portion of the rendezvous maneuver, or more specifically, the selection of thrusting and guidance laws required to insure a soft contact between the maneuverable interceptor and the target satellite. The survey pointed out the need for a more general parametric study of the terminal phase of orbital rendezvous; in particular, optimal guidance laws.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0412664

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) JOINT COST AND PRICE DISCRIMINATION OF COMMUNICATIONS SATELLITES,

Personal Author(s):

Johnson, Leland L

Report Date:

May 1963

Media Count:

34 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0402496

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/402496.pdf

Size: 533 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD402496>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SINGULAR SOLUTIONS OF AN INTEGRO-DIFFERENTIAL EQUATION IN RADIATIVE TRANSFER

Personal Author(s):

Mullikin, T W

Report Date:

Apr 1963

Media Count:

26 Page(s)

Report Number(s):

RM-3575-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) In the theory of radiative transfer in a homogeneous isotropic slab of thickness r the scattering (reflection) function can be determined by a nonlinear integro-differential equation and initial conditions. For a numerical analysis of this equation it is often important to know the behaviour of solutions in the vicinity of the desired solution. We extend in this Memorandum our previous treatment, RI-3548-PR, of conservative and isotropic scattering to the nonconservative case. We exhibit a set of initial conditions for which the solutions to our nonlinear integro-differential equation are infinite for finite values of the parameter T . Some of these singular solutions first come close to the desired solution and then diverge to infinity. The nearness of approach of these singular solutions is proportional to a

quantity which measures the nearness of local scattering to the conservative case. The conservative case is again found by a continuous passage from nonconservative to conservative scattering.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0403268

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/403268.pdf

Size: 636 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD403268>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) USES OF AUTOMATED FORCE COST MODELS

Personal Author(s):

Grosse, R N

Proschan, A

Report Date:

Apr 1963

Media Count:

22 Page(s)

Report Number(s):

RM-3608-ASDC

XD-OASD-C

Contract Number:

SD-83

Monitor Series:

OASD-C

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) An automated force cost model is a device for rapidly computing resource and cost requirements of a force specified as to its composition in force units, deployments, equipping and manning levels, and numerous other cost- affecting characteristics. The newly established planning programming-budgeting cycle in the Department of Defense has created a greater demand for resources and cost estimating, and this has brought cost modeling into greater prominence. While actual operating experience with cost models has thus far been largely confined to the planning phase, there are substantial uses that can be visualized for models in programming and budgeting as well. After a discussion of the uses of cost models in planning, this Memorandum outlines the several uses in programming and budgeting, both as alternates to estimates by program managers and as adjuncts to them.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0403337

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/403337.pdf

Size: 4 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD403337>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DISASTER AND RECOVERY: A HISTORICAL SURVEY

Personal Author(s):

Hirshleifer, Jack

Report Date:

Apr 1963

Media Count:

139 Page(s)

Report Number(s):

RAND-RM-3079-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) An investigation is presented of the economic characteristics of several major disasters and recoveries in modern times. This memorandum does not address itself directly to current policy issues concerning the measures that could be taken to facilitate recovery from the damage that might be suffered in a thermonuclear war. The purpose is to bring together selected background information from secondary sources about the economic aspects of a number of major disasters and recoveries. This study of real disasters and the problems actually encountered in recovery may provide an element of concreteness useful to students of hypothetical disasters. For limited nuclear exchanges the scale of damage might be comparable to that suffered in one or more of the disasters studied. Even if historical experience does not offer close analogies, a study of this kind may provide some suggestive insights for those concerned with the economic consequences of thermonuclear war.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0403335

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/403335.pdf

Size: 625 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD403335>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Dissipation effects controlling the electrical morphology of the mesosphere

Descriptive Note:

Memorandum

Personal Author(s):

Goldberg, P A

Report Date:

Apr 1963

Media Count:

24 Page(s)

Report Number(s):

RAND-RM-3585-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Electrical dissipation in the mesosphere is dominated by gas particle collisions. Hence, the electrical properties of this region are controlled by the density of the atmosphere. For low-frequency propagation, the electromagnetic properties of the mesosphere can be described in terms of variations with altitude of the local complex refractive index. For the simple condition of excitation of the mesosphere by a single kind of ionizing radiation, the complex refractive index should have exponential-scale variation with altitude of less than 12 km for the lower mesosphere. Sudden onset of more complex conditions of excitation may trigger the mesosphere sphere into a state of shelving or ducted structure in its electrical properties. Depending on the details of the excitation, such ducting will contain regions of negative gradients in the altitude variation of the electrical properties, instead of merely the positive gradient with a 12-km upper limit.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0403348

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/403348.pdf

Size: 862 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD403348>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRICE BEHAVIOR UNDER ALTERNATIVE FORMS OF PRICE EXPECTATIONS

Personal Author(s):

Fishman, George S

Report Date:

Apr 1963

Media Count:

28 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The components of the variance of price are analyzed. In the models considered, a price process is assumed to be evolving through time. It is composed of fluctuations of different lengths of time. The relative importance of these fluctuations in shaping the over-all process may show how well a particular model leads to the price behavior commonly observed. This elaboration will extend the traditional synthesis by means of the theory of stationary time series, or more precisely, the spectral representation of such series. Questions to be answered are, for example: What is the relative importance of fluctuations of different lengths of time in the price process. How will reducing the production period affect price. How influential are price expectations on price. Attention is restricted to situations wherein temporary shifts in economic phenomena are dominant over permanent changes in the economic structure. This focus precludes any change in the equilibrium price and, therefore, simplicity dictates that deviation from equilibrium only be considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0404017

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/404017.pdf

Size: 876 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD404017>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TABLES OF RANDOM SAMPLE SIZES NECESSARY TO ESTIMATE MEAN AND AGGREGATE VALUES

Personal Author(s):

Brown, R G

Report Date:

Apr 1963

Media Count:

30 Page(s)

Report Number(s):

RAND-RM-3537-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This analysis presents examples of 16 of random sample sizes necessary to estimate mean and aggregate values. The tables provide a readily useful tool for determining an appropriate sample size once the person designing a plan makes certain quantitative statements. The tables were developed as an aid in using sampling methods to estimate such financial characteristics of a total inventory as its aggregate dollar value or average value per line item stored. The computed tables permit the estimator to select the amount of precision and confidence desired in the estimate of total population characteristics.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0402289

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/402289.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD402289>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NUCLEAR CONTROL AFTER NASSAU

Personal Author(s):

Hoag, Malcolm W

Report Date:

Apr 1963

Media Count:

27 Page(s)

Report Number(s):

P-2733

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401874

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /U2/401874.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401874>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANALYSIS OF CHEMICAL CONSTITUENTS OF BLOOD BY DIGITAL COMPUTER

Personal Author(s):

Maloney, Jr , James V

DeHaven, James C

DeLand, Edward C

Bradham, Gilbert B

Report Date:

Apr 1963

Media Count:

40 Page(s)

Report Number(s):

RM-3541-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401831

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /U2/401831.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401831>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TRANSIENT SOUND PROPAGATION IN A SIMPLE MODEL OF A TRIPLE-LAYERED MEDIUM

Descriptive Note:

Research memo.

Personal Author(s):

Pierce, Allan D

Report Date:

Apr 1963

Media Count:

91 Page(s)

Report Number(s):

RAND/RM-3478

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A theoretical study of the transient sound propagation from a point source in a triplelayered medium consisting of a homogeneous fluid layer sandwiched between two similar half spaces of the same density but of higher sound speed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0402288

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/402288.pdf

Size: 1 MB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD402288>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) NONLINEAR INTEGRAL EQUATIONS OF RADIATIVE TRANSFER
Personal Author(s):
Mullikin, Thomas W
Report Date:
Apr 1963
Media Count:
51 Page(s)
Report Number(s):
P-2736
XC-AFRDC
Monitor Series:
AFRDC
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0415767
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) SAVINGS AND THE MEASUREMENT OF ' 'SELF-HELP' ' IN DEVELOPING COUNTRIES,
Personal Author(s):
Wolf, Charles, Jr
Report Date:
Apr 1963
Media Count:
47 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method is described for dealing with the problem of self help. The method consists of deriving standards or "norms" for individual countries from a multiple regression model that expresses some indicator of performance (in this case, savings) as a function of several indicators of socio-economic structure. Several different savings models are described which are similar in that they express savings as a function of the same types of structural indicators: Gross National Product (GNP); per capita GNP; urbanization, measured alternatively by urban income or urban population; and international trade. Also discussed is the data that are used, principally derived from United Nations and AID sources, as well as the reservations that should be observed in the use of the data. Some of the empirical results are summarized for the different models and for the regional grouping for Asia, Latin America, Africa, and the Middle East. Consideration is presented of the possible uses to which the approach might be put; suggests additional work that would be desirable in order to develop and refine the method; and outlines a number of caveats and qualifications concerning data reliability and other matters that apply to this approach. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405687

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405687.pdf

Size: 359 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405687>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OPTIMUM EVASION VERSUS SYSTEMATIC SEARCH

Personal Author(s):

Efron, Bradley

Report Date:

Apr 1963

Media Count:

21 Page(s)

Report Number(s):

RM-3582-ARPA

XC-AFRDC

Contract Number:

SD-79

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The solution of the following hide and seek game is presented: At each move Player I, the evader, is allowed to hide in one room, while Player II, the searcher, is allowed to search some given number of rooms. The restriction is made that Player II searches without repetition, that is, he is never allowed to return to a room he has previously searched. It is shown that if the payoff to Player I is any increasing function of the number of moves before capture, his best strategy is also never to return to a room in which he has previously hidden. A formula for the value of the game is presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0410774

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A PROBABILISTIC APPROACH FOR SCATTERING OF LIGHT IN SLAB GEOMETRY-I,

Personal Author(s):

Ueno, Sueo

Report Date:

Apr 1963

Media Count:

15 Page(s)

Report Number(s):

RM-3602-ARPA

Contract Number:

SD79

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A new probabilistic approach to radiative transfer problems is presented in such a way that the integral equations for the stationary and nonstationary scattering functions in a finite inhomogeneous flat layer are derived directly from a somewhat modified form of the Chapman-Kolmogoroff equation.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405855

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405855.pdf

Size: 19 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405855>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DATA FOR ICBM RE-ENTRY TRAJECTORIES

Descriptive Note:

Memo.

Personal Author(s):

Morris, Deane N

Benson, P

Report Date:

Apr 1963

Media Count:

127 Page(s)

Report Number(s):

RM-3475-ARPA

XD-ARPA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Basic trajectory data during re-entry are presented for a series of re-entry vehicle ballistic coefficients ranging from 300 to 3000 lb/sq ft. Reentry flight-path angles were varied from 10 to 60 deg, with re-entry velocities corresponding to a nominal ballistic range of 5500 n mi. In addition to the usual trajectory parameters, a number of other variables particularly useful in studies of low altitude interception systems are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405873

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405873.pdf

Size: 820 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405873>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A NUMERICAL INVERSION OF THE LAPLACE TRANSFORM

Personal Author(s):

Bellman, Richard
Kalaba, Robert
Shiffman, Bernard

Report Date:

Apr 1963

Media Count:

26 Page(s)

Report Number(s):

RM-3513-ARPA

XD-ARPA

Contract Number:

SD-79

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) Usual analytic methods of inverting the Laplace transformation are mostly impractical for numerical work. A method applicable to the numerical analysis of the inverse Laplace transform is discussed.

Numerical examples are given to illustrate this method.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0407506

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/407506.pdf

Size: 609 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD407506>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANGLE TRACKING ACCURACY OF PHASED ARRAY RADARS

Personal Author(s):

Brennan, L E

Report Date:

Apr 1963

Media Count:

31 Page(s)

Report Number(s):

RAND-RM-3587

XD-ARPA

Contract Number:

SD-79

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The angular accuracy of phase array radars, with assumptions appropriate to the problem of hardpoint ballistic missile defense, is discussed. An equation is derived relating angular accuracy to the signal-to-noise ratio in individual channels of the array and to random component errors in the individual channels. This equation is applicable to arrays with non-uniformly spaced elements, which are often considered for use in hard point defense systems. Smoothing of radar data to obtain estimates of angle and angular rate for interceptor guidance is also discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0404107

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /U2/404107.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD404107>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME APPLICATIONS OF OPERATIONS RESEARCH TO PROBLEMS OF DEVELOPING COUNTRIES

Personal Author(s):

Wolf, Jr, Charles,

Report Date:

Apr 1963

Media Count:

35 Page(s)

Report Number(s):

P-2732

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The use of quantitative analytical techniques in decision-making with regard to the problems of developing countries is suggested. Some contributions are: raising and tightening the level of discussion preceding decisions; uncovering and clarifying the alternative choices that are available; and focusing conscious attention on the policy 'values' or preferences that are implicit in a particular choice by making explicit the foregone benefits associated with the available alternatives.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405303

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405303.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405303>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A COMPUTING PROGRAM FOR DETERMINING CERTAIN STATISTICAL PARAMETERS ASSOCIATED WITH POSITION AND VELOCITY ERRORS FOR ORBITING AND RE-ENTERING SPACE VEHICLES

Descriptive Note:

Memorandu,

Personal Author(s):

Gabler, R T

Belcher, S J

Johnson, G D

Report Date:

Apr 1963

Media Count:

59 Page(s)

Report Number(s):

RAND-RM-3609-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) For most applications of satellites and re-entering space vehicles, one must be concerned with the accuracy with which position and velocity can be determined and predicted while on orbit and at the time of earth impact. A computing program is described for estimating, in terms of confidence regions, the on-orbit and impact errors of such vehicles. In estimating impact errors, guidance errors are combined with orbital prediction errors. The analytically determined sensitivity coefficients are used in this program as a means of error propagation. Their expression as functions of orbital parameters may make them useful for other purposes, such as estimating performance requirements of tracking and prediction systems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405041

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405041.pdf

Size: 3 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405041>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MONTE CARLO CALCULATIONS OF THE TRANSPORT OF 14 MEV NEUTRONS IN THE ATMOSPHERE

Descriptive Note:

memorandum rept.

Personal Author(s):

Marcum, J I

Report Date:

Apr 1963

Media Count:

126 Page(s)

Report Number(s):

RM 3531 PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The Monte Carlo method for the solution of complicated problems involving nuclear radiation is presented. This method has been used chiefly when solution by other means was prohibitively complicated. The solution to a number of problems involving the transport of 14 Mev neutrons in air is given. It should be useful as a guide for those offices and research organizations that have copies of the RAND Monte Carlo neutron transport code.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0404917

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/404917.pdf

Size: 827 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD404917>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CLOSE-IN ELECTROMAGNETIC FIELDS PRODUCED BY NUCLEAR EXPLOSIONS

Personal Author(s):

Sollfrey, W

Report Date:

Apr 1963

Media Count:

38 Page(s)

Report Number(s):

RM-3525-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The close-in electromagnetic fields produced by deflection in the earth's field of Compton electrons from a nuclear explosion are analyzed. Maxwell's equations in spherical coordinates are solved by an expansion in the perturbation fields, taking into account the space and time dependence of the conductivity and Compton current. The field structure is determined, and it is shown that the peak change in field is only 10 per cent.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405301

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405301.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405301>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME FUNDAMENTALS OF NATO ORGANIZATION

Descriptive Note:

Memorandum

Personal Author(s):

Vandevanter, Jr, E

Report Date:

Apr 1963

Media Count:

90 Page(s)

Report Number(s):

RAND-RM-3559-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Discussion and concepts for remodeling the organizational structure of NATO.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0400923

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/400923.pdf

Size: 509 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD400923>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A STUDY OF BLOOD BY CHEMICAL ANALYSIS AND BY DIGITAL COMPUTER: A COMPARATIVE EVALUATION

Personal Author(s):

DeHaven, James C

DeLand, Edward C

Bradham, Gilbert B

Maloney, Jr, James V

Report Date:

Apr 1963

Media Count:

17 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401141

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401141.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401141>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COMMUTING AND THE RESIDENTIAL DECISIONS OF CHICAGO AND DETROIT CENTRAL BUSINESS DISTRICT WORKERS

Personal Author(s):

Kain, John F

Report Date:

Apr 1963

Media Count:

47 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401392

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401392.pdf

Size: 588 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401392>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE NONLINEAR DIFFERENCE-DIFFERENTIAL EQUATION $\dot{X}(T) = G_1(X(T))G_2(X(T-1))$

Personal Author(s):

Brown, Thomas A

Report Date:

Apr 1963

Media Count:

30 Page(s)

Report Number(s):

RM-3540-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) In this Memorandum the author studies the asymptotic behavior of solutions of real difference-differential equations, and the question of the existence and behavior of periodic solutions. The equations considered arise in a wide variety of control problems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401642

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401642.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401642>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME THOUGHTS ON THE THEORY OF COOPERATIVE GAMES

Personal Author(s):

Jentzsch, Gerd

Aumann, R J

Report Date:

Apr 1963

Media Count:

54 Page(s)

Report Number(s):

RM-3398-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401393

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401393.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401393>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INSTRUMENTAL VARIABLES IN FACTOR ANALYSIS

Personal Author(s):

Madansky, Albert

Report Date:

Apr 1963

Media Count:

21 Page(s)

Report Number(s):

RM-3591-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401221

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401221.pdf

Size: 277 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401221>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN INVERSE PROBLEM IN DYNAMIC PROGRAMMING AND AUTOMATIC CONTROL

Descriptive Note:

Memorandum

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Report Date:

Apr 1963

Media Count:

13 Page(s)

Report Number(s):

RAND-RM-3592-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401222

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401222.pdf

Size: 318 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401222>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A UNIQUENESS CONDITION FOR NONTRIVIAL PERIODIC SOLUTIONS TO THE LIENARD EQUATION

Descriptive Note:

Memorandum

Personal Author(s):

Brown, T A

Report Date:

Apr 1963

Media Count:

15 Page(s)

Report Number(s):

RAND-RM-3570-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0299572

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE EFFICIENCY OF THREE-STAGE LEAST-SQUARES ESTIMATION

Personal Author(s):

MADANSKY,ALBERT

Report Date:

30 Mar 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422825

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN FUNCTIONAL EQUATIONS OCCURRING IN DECISION PROCESSES,

Personal Author(s):

Harris,T E

Bellman,Richard

Shapiro,Harold N

Report Date:

18 Mar 1963

Media Count:

62 Page(s)

Report Number(s):

P-382

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Certain problems are considered which arise from a study of the Bales decision making model. The Markov process associated with this model is considered and existence and continuity, as well as a functional equation, are obtained for the limit distribution. Generalizations of this functionalequation are discussed and a detailed treatment is given for the one-dimensional case. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405302

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405302.pdf

Size: 801 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405302>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SOVIETS AND THE U-2 PHOTOS - AN HEURISTIC ARGUMENT

Descriptive Note:

Memorandum

Personal Author(s):

Katz, Amrom

Report Date:

Mar 1963

Media Count:

29 Page(s)

Report Number(s):

RAND-RM-3584-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0405689

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/405689.pdf

Size: 796 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD405689>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN APPROACH TO THE STUDY OF A DEVELOPING ECONOMY BY OPERATIONAL GAMING

Personal Author(s):

Helmer, Olaf

Quade, E S

Report Date:

Mar 1963

Media Count:

26 Page(s)

Report Number(s):

RAND-P-2718

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The possible use of operational gaming, or simulation involving human players, to examine an economy as a whole is considered. It is believed that this operations research technique could become an extremely useful tool for the study of a developing economy. In the present state of the art it is not going to provide, with confidence, direct recommendations on what to do about matters of national policy. Rather it is an educational device, providing both ideas and insights, useful for the generation and preliminary comparison of alternative economic policies.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0400573

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/400573.pdf

Size: 356 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD400573>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND MATHEMATICAL ECONOMICS

Personal Author(s):

Bellman, Richard

Report Date:

Mar 1963

Media Count:

16 Page(s)

Report Number(s):

RM-3539-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401339

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401339.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401339>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) HYPERSONIC STRONG VISCOUS INTERACTION OF A FLAT PLATE WITH SURFACE MASS TRANSFER

Personal Author(s):

Li, Ting-Yi

Gross, Joseph F

Report Date:

Mar 1963

Media Count:

57 Page(s)

Report Number(s):

RM-3000-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401340

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401340.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401340>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COMMUNIST CHINA AND NUCLEAR FORCE

Personal Author(s):

Hsieh, Alice L

Report Date:

Mar 1963

Media Count:

45 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0299137

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME ASPECTS OF NONLINEAR ALLOCATION PROCESSES

Personal Author(s):

KALABA,ROBERT

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0299590

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MODEL OF THE ANNUAL TEMPERATURE VARIATIONS AT 30 DEGREES N AND 60 DEGREES N
BETWEEN 30 AND 50 KM

Personal Author(s):

BATTEN,E S

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298973

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SURVEY OF EXOBIOLOGY

Personal Author(s):

SEYBOLD,PAUL G

Report Date:

Mar 1963
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0404010
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/404010.pdf
Size: 1 MB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD404010>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) STRATEGIC AMBIGUITY, ASYMMETRY AND ARMS CONTROL: SOME BASIC CONSIDERATIONS
Descriptive Note:
Memorandum
Personal Author(s):
Avercha, Harvey
Report Date:
Mar 1963
Media Count:
34 Page(s)
Report Number(s):
RAND-RM-3426-PR
XC-AFRDC
Contract Number:
AF 49(638)-700
Monitor Series:
AFRDC
Report Classification:
Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This study investigates the conditions under which some types of arms control agreements, when there is adequate inspection and verification, may be used as a tool by the Soviet Union to achieve strategic objectives that are undesirable or dangerous to the United States, given current U. S. strategic superiority and the asymmetries in the force structures of both nations. Sets of objectives and postures are examined in a dynamic context to determine those sets that could produce future arms agreements and the types of agreements that might be produced.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298961

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RADIATIVE TRANSFER IN HOMOGENEOUS ANISOTROPIC SLABS

Personal Author(s):

MULLIKIN, T W

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0298931
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) CIRCULATION IN RELATIVISTIC CONTINUUM MECHANICS
Personal Author(s):
EDELLEN, DOMINIC G B
Report Date:
Mar 1963
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0298277
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A TYPE OF INSTABILITY OF AN INTEGRO-DIFFERENTIAL EQUATION FOR THE SCATTERING FUNCTION
IN RADIATIVE TRANSFER
Personal Author(s):
MULLIKIN, T W
Report Date:
Mar 1963
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298297

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ROTATION TENSORS AND IRROTATIONAL MOTIONS IN EINSTEIN-RIEMANN SPACES

Personal Author(s):

EDELEN,DOMINIC G B

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298789

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON ANOTHER PROPERTY OF THE FUNCTION -PLN(P)

Personal Author(s):

EDELEN,DOMINIC G B

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0298927
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) TOWARD AN INFORMAL AND CREATIVE CONFERENCE METHOD
Personal Author(s):
KELLER,BENJAMIN
Report Date:
Mar 1963
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0401338
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/401338.pdf
Size: 891 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401338>
Corporate Author:
RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PLANT MODERNIZATION UNDER CONDITIONS OF COMPETITION AND TECHNOLOGICAL
IMPROVEMENT

Personal Author(s):

Kalaba, R

Kent, A

Prestrud, M

Report Date:

Mar 1963

Media Count:

45 Page(s)

Report Number(s):

RM-3551-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298282

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BATTERY OPERATED ELECTRIC AUTOMOBILES

Personal Author(s):

HOFFMAN,GEORGE A

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0401527
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/401527.pdf
Size: 404 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401527>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) INVARIANT IMBEDDING AND RAREFIED GAS DYNAMICS
Personal Author(s):
Aroesty, J
Bellman, R
Report Date:
Mar 1963
Media Count:
17 Page(s)
Report Number(s):
RM-3497-ARPA
XD-DARPA
Monitor Series:
DARPA
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0299487

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON DIFFERENTIAL APPROXIMATION AND ORTHOGONAL POLYNOMIALS

Personal Author(s):

BELLMAN,RICHARD

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0400120

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/400120.pdf

Size: 10 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD400120>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET NATIONAL INCOME AND PRODUCT IN 1965: THE GOALS OF THE SEVEN YEAR PLAN

Personal Author(s):

Becker, Abraham S

Report Date:

Mar 1963

Media Count:

248 Page(s)

Report Number(s):

RAND-3520-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0615883

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELECTRIC MOTOR CARS.

Descriptive Note:

Memo.,

Personal Author(s):

Hoffman,George A

Report Date:

Mar 1963

Media Count:

59 Page(s)

Report Number(s):

RM-3298-FF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The electric automobiles studied are designed as the equivalent of their gasoline-engine counterparts in size, comfort, performance, and initial acceleration. Top speeds comparable to those of small present-day cars are shown to be realizable, though the range between refueling is not. Batteries are shown to be the most promising prospect for storing and delivering energy to the motor, achieving in some instances ranges up to 200 mi between battery recharges. On the other hand, fuel cells using inexpensive fuels, though affording much greater range, are shown to be too heavy at present for automotive use. Many appealing aspects of urban electric auto use are listed, such as less air pollution, less land area required for automation, and noise abatement. The lifetime costs derived can be somewhat lower than those of conventional cars; therefore it is concluded that electric cars could be substituted advantageously for conventional cars for individual urban transportation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0402992

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/402992.pdf

Size: 576 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD402992>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME SUGGESTED CHANGES IN RESEARCH AND DEVELOPMENT STRATEGY AND THEIR IMPLICATION FOR CONTRACTING

Personal Author(s):

Glennan, Jr, Thomas K

Report Date:

Mar 1963

Media Count:

15 Page(s)

Report Number(s):

P-2717

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401778

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401778.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401778>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EXPORT CONCENTRATION AND FLUCTUATIONS IN EXPORT EARNINGS: A CROSS-SECTION ANALYSIS

Personal Author(s):

Massell, Benton F

Report Date:

Mar 1963

Media Count:

40 Page(s)

Report Number(s):

RM-3432-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0402285

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/402285.pdf

Size: 322 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD402285>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME RAMBLINGS AND MUSINGS ON TACTICAL RECONNAISSANCE

Personal Author(s):

Katz, Amrom H

Report Date:

Mar 1963

Media Count:

10 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0402137

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /U2/402137.pdf

Size: 347 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD402137>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME COMMENTS ON PROGRAM BUDGETING IN THE DEPARTMENT OF DEFENSE

Personal Author(s):

Fisher, G H

Report Date:

Mar 1963

Media Count:

11 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401773

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /U2/401773.pdf

Size: 641 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401773>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SELECTION OF MATERIALS IN MINIMUM WEIGHT DESIGN

Personal Author(s):

Micks, William R

Report Date:

Mar 1963

Media Count:

27 Page(s)

Report Number(s):

P-2729

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This paper discusses how the selection of materials is related to the over-all process of minimum weight design. Examples are given to illustrate the process and to show the necessity for basing materials comparisons on the proper design parameters.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0400141

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/400141.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD400141>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME LIMIT THEOREMS ASSOCIATED WITH A RECURRENT EVENT

Personal Author(s):
Port, S C
Report Date:
Mar 1963
Media Count:
75 Page(s)
Report Number(s):
RM-3491-PR
XC-USAF
Monitor Series:
USAF
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0401478
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/401478.pdf
Size: 1 MB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401478>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) THE INTERACTION OF LASER LIGHT WITH METALS (ELECTRON-OPTICAL PHONON INTERACTION IN METALS)
Descriptive Note:
Memo
Personal Author(s):
Yura, H T
Report Date:
Mar 1963

Media Count:

40 Page(s)

Report Number(s):

RAND-RM-3560-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0299478

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ARTIFICIAL INTELLIGENCE AND BRAIN MECHANISMS

Personal Author(s):

MARON,M E

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0625350

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LUNAR SURFACE VEHICLES, A BRIEF REVIEW OF CURRENT DESIGN CONCEPTS,

Personal Author(s):

Bliss,P H

Report Date:

Mar 1963

Media Count:

21 Page(s)

Report Number(s):

P-2728

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The most desirable attributes of a vehicle designed to traverse the surface of the Moon are absolute dependability, trafficability over any surface, and provisions for life support. But the design of such a vehicle is complicated not only by the uncertainties concerning the lunar surface itself but also by the extremes of an environment that is hostile both to man and machine. Although the design trend for lunar vehicles seems to favor conventional wheels and tracks for surface contact, some unconventional designs, such as spiral-screw vehicles and walking machines, are being worked on. Until more lunar data become available, the study and testing of a variety of designs, each based on certain assumptions about conditions on the Moon, will continue to be necessary. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0299313

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IS THE USSR SUPERIOR TO THE WEST AS A MARKET FOR PRIMARY PRODUCTS

Personal Author(s):

NEUBERGER,EGON

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401490

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401490.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401490>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INPUT-OUTPUT AND SOVIET PLANNING A SURVEY OF RECENT DEVELOPMENTS

Descriptive Note:

Memorandum rept.

Personal Author(s):

Becker, Abraham S

Report Date:

Mar 1963

Media Count:

36 Page(s)

Report Number(s):

RM-3532-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Mathematical economics in soviet economic organization.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297968

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN INTRODUCTION TO THE APPLICATION OF DYNAMIC PROGRAMMING TO LINEAR CONTROL SYSTEMS

Personal Author(s):

SMITH,F T

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297954

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND THE INTERGRATION OF HAMILTON'S EQUATIONS

Personal Author(s):

BELLMAN,RICHARD

KALABA,ROBERT

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297922

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME TOPICS IN SEQUENTIAL DETECTION AND ESTIMATION

Personal Author(s):

SELIN,IVAN

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297849

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GUIDE TO THE GENERAL PROBLEM-SOLVER PROGRAM GPS-2-2

Personal Author(s):

NEWELL,ALLEN

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297072

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/297072.pdf

Size: 745 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD297072>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GRAPH THEORY AND AUTOMATIC CONTROL

Personal Author(s):

Kalaba, Robert

Report Date:

Feb 1963

Media Count:

27 Page(s)

Report Number(s):

RAND-P-2704

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) THEORIZES ON AUTOMATIC CONTROL OF SEVERAL IMPORTANT CLASSES OF PROBLEMS. Several important classes of problems in the theory of automatic control--including time optimal control--find a natural setting in the field of graph theory. Various aspects of formulation, analytical and numerical treatment, and implementation are sketched.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297030

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/297030.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD297030>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE CORE OF AN ECONOMY WITH NONCONVEX PREFERENCES

Personal Author(s):

Shapley, L S

Shubik, Martin

Report Date:

Feb 1963

Media Count:

51 Page(s)

Report Number(s):

RM-3518-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A model of a pure exchange economy is investigated without the usual assumption of convex preference sets for the participating traders. The concept of core, taken from the theory of games, is applied to show that if there are sufficiently many participants, the economy as a whole will possess a solution that is sociologically stable--i.e., that cannot be upset by any coalition of traders.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0296598

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/296598.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296598>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) REMOVING THE NOISE FROM THE QUANTIZATION PROCESS BY DITHERING: LINEARIZATION

Personal Author(s):

FURMAN, G G

Report Date:

Feb 1963

Media Count:

46 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The linearization of the highly important multistep quantizer nonlinearity by the application of independent quantizer activators called dithers is treated. For the dithered quantizer acting (as it often does) in conjunction with a low-pass or band-pass filter, numerical answers are given for the first time to the following questions: (1) What is the equivalent quantizer gain (2) What upper bounds does the dither place upon the maximum deviation from linearity (3) How does one determine, for given specifications, a dither amplitude so that the system is optimally dithered Such information, with regard to two time-periodic dithers (the sinusoid and sawtooth) makes it possible to effect analog-to-digital-to-analog conversion (to name one application) with no apparent loss of information even when the quantization is rough. The properties of the sinusoidal and sawtooth waves as quantizer linearizers are developed in detail; it is shown that the sawtooth is superior to the more popular sinusoid in most important respects.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297755

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:
(U) WAR GAMING
Personal Author(s):
FAXSON, E W
Report Date:
Feb 1963
Media Count:
35 Page(s)
Report Number(s):
RM-3489-PR
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0295952
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/295952.pdf
Size: 353 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD295952>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) DETAB-X AND THE WORLD OF BANKING
Personal Author(s):
POLLACK, SOLOMON L
Report Date:
Feb 1963
Media Count:
15 Page(s)
Report Number(s):
XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0296068

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/296068.pdf

Size: 3 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296068>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COMMUNICATIONS SATELLITES: TECHNOLOGY, ECONOMICS, AND SYSTEM CHOICES

Descriptive Note:

Research memorandum

Personal Author(s):

Reiger, S H

Nichols, R T

Early, L B

Dews, E

Report Date:

Feb 1963

Media Count:

110 Page(s)

Report Number(s):

RM-3487-RC

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The present study focuses on the possible system choices implied by United States policy to establish a commercial communications satellite system as promptly as possible and to extend it to provide global coverage at the earliest possible date.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297757

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXPERIMENTS IN LINEAR PROGRAMMING: NOTES ON LINEAR PROGRAMMING AND EXTENSIONS - PART 63

Personal Author(s):

CUTLER,LEOLA

WOLFE,PHILIP

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0296925

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/296925.pdf

Size: 479 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296925>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A NOTE ON NONLINEAR SUMMABILITY TECHNIQUES IN INVARIANT IMBEDDING

Personal Author(s):

BELLMAN, RICHARD

KALABA, ROBERT

Report Date:

Feb 1963

Media Count:

19 Page(s)

Report Number(s):

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The use of principles of invariance, as in invariant imbedding and dynamic programming, leads characteristically to functional equations of the form $f_{n+1}(p) = T_n(f_n(g(p)))$, $n = 0, 1, 2, \dots$, where $f_0(p)$ is known. The computational solution proceeds stagewise, with f_1 determined from a knowledge of f_0 , f_2 determined by f_1 , and so on. In general, what is desired is the transient behavior, small n , and the steady-state, or asymptotic behavior as $n \rightarrow \infty$. In a number of significant processes--radiative transfer, control theory, inventory theory, and Markovian decision processes in general--only the asymptotic results are of interest. This is also the case in the application of gradient techniques. The application of nonlinear summability techniques to radiative transfer is outlined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0296067

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/296067.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296067>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SUBMARINE TELEPHONE CABLES AND INTERNATIONAL TELECOMMUNICATIONS

Descriptive Note:

Research memorandum

Personal Author(s):

NICHOLS, R T

Report Date:

Feb 1963

Media Count:

40 Page(s)

Report Number(s):

RM-3472-RC

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Laying submarine telephone cables is now one of the most rapidly growing industries in the world. Three cable-laying vessels have been or will be put into service in the six months from October 1962 to March 1963. New factories which will produce submarine telephone cable are being built in the United

States, England, and Japan. A new factory which makes the type of repeaters now used on United States telephone cables was recently completed. The value of the investment in long-distance submarine telephone cables was \$210,000,000 at the end of 1962; during the next three years alone (1963, 1964, and 1965) cables will be laid with a value of \$400,000,000. With allowance for a substantial growth in demand for overseas telecommunications services (but without allowance for the effect on volume of any future reductions in prices of such services), it appears that the present and projected telephone cable facilities will be adequate to meet demands on the North Atlantic route until 1965 and on other routes for a few more years.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0400631

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/400631.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD400631>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GUERRILLA-COMBAT, STRATEGY AND DETERRENCE IN SOUTHEAST ASIA

Personal Author(s):

Reinhardt, G C

Report Date:

Feb 1963

Media Count:

26 Page(s)

Report Number(s):

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298966

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELECTRONIC DATA PROCESSING FOR CITIES -- THE BROAD LOOK

Personal Author(s):

HEARLE, EDWARD F R

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298967

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CALCULATIONS OF THE BLAST AND CLOSE-IN ELASTIC RESPONSE OF THE CAVITY EXPLOSIONS IN THE COWBOY PROGRAM

Personal Author(s):

BRODE, H L

PARKIN, B R

Report Date:
Feb 1963
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE
Distribution Statement:
Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0296819
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/296819.pdf
Size: 464 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296819>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) VAGUENESS AND DECISION: A REJOINDER
Personal Author(s):
ELLSBERG, DANIEL
Report Date:
Feb 1963
Media Count:
13 Page(s)
Report Number(s):
XD-XD
Monitor Series:
XD
Report Classification:
Unclassified
Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0433274

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC SELECTION OF ALTERNATIVE RISK INVESTMENTS,

Personal Author(s):

English,J M

Haase,R H

Report Date:

Feb 1963

Media Count:

17 Page(s)

Report Number(s):

NO. P2869

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This study considers the selection of the best of a number of alternative investments for situations where the alternatives involve different cash flows. It proposes a method for comparing pairs of alternatives in terms of an acceptable minimal risk rate-of-return. The projection of future incomes and expenses is assumed to be approximated by, but not limited to, continuous functions. Values of future sums are discounted continuously. The criterion of choice introduces an expectation-variance principle such that the computed rate-of-return is established at some specified level of confidence. The technique provides a means of comparing alternatives in which the probabilities of the estimates differ for the several alternatives. The paper suggests that the method offers a better way to account for risk than the usual procedure of including it in the interest rate. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401391

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401391.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401391>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A TRIBUTE TO GEORGE W. GODDARD

Personal Author(s):

Katz, Amrom H

Report Date:

Feb 1963

Media Count:

33 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0299350

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USSR AND THE WEST AS MARKETS FOR PRIMARY PRODUCTS: STABILITY, GROWTH AND SIZE

Personal Author(s):

NEUBERGER, EGON

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401703

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401703.pdf

Size: 852 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401703>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE PROBABILITY DISTRIBUTION OF ANTI-MISSILE MISSILE MISS DISTANCE DUE TO OBSERVATION AND GUIDANCE NOISE

Descriptive Note:

Memorandum

Personal Author(s):

KENDALL, W B

Report Date:

Feb 1963

Media Count:

33 Page(s)

Report Number(s):

RAND-MEMO-3505-ARPA

XD-DARPA

Contract Number:

SD-79

ARPA ORDER 189-61

Monitor Series:

DARPA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0296818

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/296818.pdf

Size: 246 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296818>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AGGREGATION AND MULTIPLICATIVE PRODUCTION FUNCTIONS

Personal Author(s):

MASSELL, BENTON F

Report Date:

Feb 1963

Media Count:

11 Page(s)

Report Number(s):

P-2702

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) Consider a sector of the economy composed of several fully integrated industries, producing final products only. Write the sectoral production function (1) $Q(t) = A(t)K(t)L(t)^{1-\alpha}$, where Q = output, K = capital input, L = labor input, t = time, and A is a technology parameter. Further, let the production function for industry i be written (2) $Q_i(t) = A_i(t)K_i(t)L_i(t)^{1-\alpha_i}$. Now, the percentage rate of technical change -- what Domar terms the Residual -- for the sector can be expressed (3) $\dot{A} = \dot{Q} - \alpha \dot{K} - (1-\alpha)\dot{L}$, $\dot{A}_i = \dot{Q}_i - \alpha_i \dot{K}_i - (1-\alpha_i)\dot{L}_i$ and similarly for an industry. The problem, then, is to find a method for weighting and aggregating the industry production functions which leaves the rate of technical change invariant with respect to aggregation. Professor Domar's solution is to raise both sides of (2) to the α_i power, where $\alpha_i = Q_i/K_i$ and to multiply Q_i , industry production functions together to obtain the sector function.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298949

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LEARNING, GENERALITY AND PROBLEM-SOLVING

Personal Author(s):

NEWELL,ALLEN

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298296

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON APPROXIMATING LINEAR ARRAY FACTORS

Personal Author(s):

DOYLE, WORTHIE

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298197

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A GEOMETRIC INTERPRETATION OF LAGRANGE MULTIPLIERS

Personal Author(s):

KAO, R C

Report Date:

Feb 1963

Media Count:

12 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298075

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NETWORK-TYPE MANAGEMENT CONTROL SYSTEMS BIBLIOGRAPHY

Personal Author(s):

FRY,B L

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298069

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) USES OF MONTE CARLO IN PERT
Personal Author(s):
VAN SLYKE,RICHARD
Report Date:
Feb 1963
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0298846
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) BRITISH ATTITUDES IN THE CUBAN CRISIS
Personal Author(s):
DEWEERD,H A
Report Date:
Feb 1963
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0292026

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MILITARY SYSTEMS ANALYSIS

Personal Author(s):

QUADE, E S

Report Date:

31 Jan 1963

Media Count:

29 Page(s)

Report Number(s):

RM-3452-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Systems analysis is an approach to complex problems of choice under uncertainty by systematically examining the costs, effectiveness, and risks of the various alternatives. This memorandum attempts to survey the problems and procedures of such analysis when applied in a military context. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0296368

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/296368.pdf

Size: 811 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296368>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANTENNA PATTERN DISTRIBUTIONS FROM RANDOM ARRAYS

Personal Author(s):

Cover, Thomas M

Report Date:

Jan 1963

Media Count:

41 Page(s)

Report Number(s):

RM-3502-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Research concerns the determination of the probability distribution of the electric field resulting from an arbitrary random array of sources (or scatterers). The distribution is surprisingly simple, is easily calculated for most interesting array distributions, and has wide generality of application. Specifically, we find the antenna pattern distribution of a synthetic aperture antenna formed by a moving space vehicle emitting pulses randomly in time. However, the results apply not only to synthetic aperture antennas of arbitrary distribution but also to randomly deleted antennas and to chaff, meteor trail, and electron cloud diagnostics as well. The problem is restricted to the study of the far field from n sources, the positions of which are independent identically distributed as $F(r)$. Markov's method is then used to analyze what is essentially a two-dimensional random walk induced by a three-dimensional distribution. It is shown that if the Fourier transform $\psi(k)$ of the distribution function $F(r)$ can be performed in closed form, then the limiting form of the probability density of the resultant electric field vector is immediately obvious for every frequency and direction of propagation. Finally, the probability density of the resultant power or envelope is determined in closed form, and the correlation between the resultant field at different angles and frequencies is exhibited.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0296064

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/296064.pdf

Size: 675 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296064>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RESEARCH ON COMMUNIST CHINA'S FOREIGN TRADE: COMMENTS ON THREE PAPERS BY SHUN-HSIN CHOU, ROBERT F. DERNBERGER, AND FENG-HWA MAH

Descriptive Note:

Conference paper

Personal Author(s):

HOEFFDING, OLEG

Report Date:

Jan 1963

Media Count:

21 Page(s)

Report Number(s):

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0296069

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/296069.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296069>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANALYSIS OF THE RESPONSE OF MOORED SURFACE AND SUBSURFACE VESSELS TO OCEAN WAVES

Descriptive Note:

Research memo.

Personal Author(s):

LEENDERTSE, J J

Report Date:

Jan 1963

Media Count:

62 Page(s)

Report Number(s):

RM-3368-PR

XC-DCSRTAF-DDP

Contract Number:

AF49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This study analyzes the response of a moored ship or submersible craft, in uniform or irregular waves, and also the forces in the mooring lines induced by ship responses. The response in heave, surge, and pitch of a moored ship or submersible craft with known hydrodynamic characteristics to waves approaching head-on can be calculated by use of the method outlined in this Memorandum. Computed values of the response of a moored 880-ton vessel (simulated by a rectangular block of equivalent displacement), moored in uniform waves, are found to compare favorably with results of model tests.

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0296070

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/296070.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296070>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ESTIMATES OF FLIGHT REGIMES IN THE VENUS ATMOSPHERE

Personal Author(s):

WEGENER, PETER P

Report Date:

Jan 1963

Media Count:

65 Page(s)

Report Number(s):

XC-DCSRTAF-DDP

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0296046

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/296046.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296046>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROGRAMMING LANGUAGES AND STANDARDIZATION IN COMMAND AND CONTROL

Personal Author(s):

HAVERTY, J P

PATRICK, R L

Report Date:

Jan 1963

Media Count:

74 Page(s)

Report Number(s):

RM-3447-PR

XC-DCSRTAF-DDP

Contract Number:

AF49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0295654

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/295654.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD295654>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) WATER SUPPLY, ECONOMICS, TECHNOLOGY AND POLICY

Personal Author(s):

DEHAVEN, JAMES C

Report Date:

Jan 1963

Media Count:

26 Page(s)

Report Number(s):

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297814

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REPORT ON THE PHYSICAL ENVIRONMENT OF THE GREAT BEAR RIVER AREA, NORTHWEST TERRITORIES, CANADA

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0294709

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GENERATION OF PERMUTATIONS BY ADJACENT TRANSPOSITION

Personal Author(s):

JOHNSON,SELMER M

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A new method is described for systematically generating all permutations of a set of objects, in which each permutation is formed exactly once. This is achieved by interchanging the marks in two adjacent positions in the preceding permutation. The procedure has certain advantages of simplicity over other methods and possibly is faster for machine computation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0298274

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SHOULD WE MAKE THE GOVERNMENT MORE BUSINESSLIKE

Personal Author(s):

McCLENON,P R

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297815

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REPORT ON THE PHYSICAL ENVIRONMENT OF THE QUOICH RIVER AREA, NORTHWEST TERRITORIES, CANADA

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0626107

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) JOINT COST AND PRICE DISCRIMINATION: THE CASE OF COMMUNICATIONS SATELLITES,

Personal Author(s):

Johnson,Leland L

Report Date:

Jan 1963

Media Count:

17 Page(s)

Report Number(s):

P-2753-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

20 - JOURNAL ARTICLES; DTIC USERS ONLY

Distribution Statement:

Availability: Published in The Journal of Business of the University of Chicago v37 n1 p32-46 Jan 1964.

Copies to DDC users only.

Abstract:

(U) The purpose of the paper is to examine the nature of the potential conflict in the establishment of a communications satellite system as between economic and political factors and the factors typically encountered in domestic industries after a description of the technology of satellites and institutional arrangements for developing and operating a commercial system, the structure of cost is analyzed. By employment of a theoretical peak-load pricing model, in light of the cost analysis, the problem of efficient pricing for satellites is discussed. It is demonstrated that the enterprise is likely to face serious dilemmas with respect to its pricing policies, given the various objectives set forth in the Communications Satellite Act.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0294994

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/294994.pdf

Size: 737 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD294994>

Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) WHAT IS RESOURCE ANALYSIS
Personal Author(s):
FISHER, G H
Report Date:
Jan 1963
Media Count:
17 Page(s)
Report Number(s):
XC-AFOSR
Monitor Series:
AFOSR
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0294995
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/294995.pdf
Size: 593 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD294995>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) INDONESIA: TOWARDS DEVELOPMENT OR EXPANSIONISM
Personal Author(s):
PAUKER, GUY J
Report Date:
Jan 1963

Media Count:

16 Page(s)

Report Number(s):

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297759

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REPORT ON THE PHYSICAL ENVIRONMENT OF SOUTHERN BAFFIN ISLAND, NORTHWEST TERRITORIES, CANADA

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297756

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REPORT ON THE PHYSICAL ENVIRONMENT OF THE THELON RIVER AREA, NORTHWEST TERRITORIES, CANADA

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297753

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REPORT OF PHYSIOGRAPHIC CONDITIONS OF EASTERN VICTORIA ISLAND AND ADJACENT AREAS, NORTHWEST TERRITORIES, CANADA

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0296931
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/296931.pdf
Size: 492 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296931>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) INCOHERENT SCATTERING OF RADIO WAVES BY A PLASMA
Personal Author(s):
DUBOIS, D F
GILINSKY, V
Report Date:
Jan 1963
Media Count:
26 Page(s)
Report Number(s):
XC-AFCRL
Contract Number:
AF 49 (638)-700
Monitor Series:
AFCRL
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0297754
Corporate Author:
RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REPORT OF THE PHYSICAL ENVIRONMENT OF NORTHERN BAFFIN ISLAND AND ADJACENT AREAS,
NORTHWEST TERRITORIES, CANADA

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0297758

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REPORT OF PHYSIOGRAPHIC CONDITIONS OF CENTRAL BAFFIN ISLAND AND ADJACENT AREAS,
NORTHWEST TERRITORIES, CANADA

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0296597

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/296597.pdf

Size: 464 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296597>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NOTES ON DEBRIS-AIR-MAGNETIC INTERACTION

Personal Author(s):

LONGMIRE, CONRAD L

Report Date:

Jan 1963

Media Count:

14 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A set of hydrodynamic-like differential equations is derived for the motion of debris and air ions as they interact through the magnetic field. Although these equations are not solved in detail, one can deduce several conclusions: (1) at early times, the fraction of the debris mixed with the magnetic field (and hence the intensity of the beta-ray aurora) is proportional to the cube of the time; (2) the outer debris ions are simply bent by the normal earth's magnetic field; and (3) air ions are picked up essentially when the debris has moved one air-ion Larmor radius.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0295145

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/295145.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD295145>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SKIN FRICTION AND STABILITY OF A LAMINAR BINARY BOUNDARY LAYER ON A FLAT PLATE

Descriptive Note:

Research memo.

Personal Author(s):

GROSS, J F

Report Date:

Jan 1963

Media Count:

79 Page(s)

Report Number(s):

RM-3485-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0294318

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STATUS REPORT OF DETAB-X (DECISION TABLE, EXPERIMENTAL)

Personal Author(s):

POLLACK, SOLOMON L

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0295562

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/295562.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD295562>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET EXPENDITURES ON SCIENTIFIC RESEARCH

Personal Author(s):

Nimitz, Nancy

Report Date:

Jan 1963

Media Count:

75 Page(s)

Report Number(s):

RM-3384-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:
DCSRTAF-DDP
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0295146
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/295146.pdf
Size: 1 MB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD295146>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) A PROGRAMMING SYSTEM FOR GENERAL NEURAL NETS
Descriptive Note:
Research memo.
Personal Author(s):
SMITH, J W
Report Date:
Jan 1963
Media Count:
47 Page(s)
Report Number(s):
RM-3416-PR
XC-DCSRTAF-DDP
Contract Number:
AF 49(638)-700
Monitor Series:
DCSRTAF-DDP
Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0296924

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/296924.pdf

Size: 4 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD296924>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROCEEDINGS OF RAND'S DEMAND PREDICTION CONFERENCE JANUARY 25-26, 1962

Personal Author(s):

ASTRACHAN, MAX

CAHN, ALBERT S

Report Date:

Jan 1963

Media Count:

145 Page(s)

Report Number(s):

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0295650

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/295650.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD295650>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DATA TRANSMISSION ERRORS: COMPARISON OF LF RADIO WITH TELEPHONE FACILITIES

Personal Author(s):

MERTZ, P

Report Date:

Jan 1963

Media Count:

41 Page(s)

Report Number(s):

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0407200

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/407200.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD407200>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DETERMINING ECONOMIC QUANTITIES OF MAINTENANCE RESOURCES: A MINUTEMAN APPLICATION

Personal Author(s):

Bell, Chauncey F

Kamins, Milton

Report Date:

Jan 1963

Media Count:

58 Page(s)

Report Number(s):

RM-3308-PR

XC-AFRDC

Contract Number:

AF-49-638-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This Memorandum introduces a technique for computing manpower and equipment requirements that takes into account three critical and frequently overlooked factors. These are: the randomness of the failure pattern - the uncertainty of the time any particular malfunction will occur; the workshift policy - when maintenance personnel are on duty; and the cost-effectiveness trade off - the marginal increase in system capability weighed against the cost of providing a marginal increase in resources. The quantities of maintenance personnel and ground equipment estimated with the technique presented here will economically meet anticipated requirements within the accuracy limitations of the three

inputs necessary to the computation. These are: failure rate or reliability, repair time or maintainability, and cost.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0295127

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/295127.pdf

Size: 338 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD295127>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RADIATION ENVIRONMENT FOR MANNED SPACECRAFT

Personal Author(s):

DOLE, S H

Report Date:

Jan 1963

Media Count:

10 Page(s)

Report Number(s):

XC-USAFA

Monitor Series:

USAFA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0401776

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/401776.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD401776>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE DESIGN AND OBJECTIVES OF LABORATORY PROBLEM 4

Personal Author(s):

Cohen, I K

Report Date:

Jan 1963

Media Count:

45 Page(s)

Report Number(s):

RM-3354-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0295144

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /U2/295144.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD295144>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE GROWTH OF THE HYPERSONIC TURBULENT WAKE BEHIND BLUNT AND SLENDER BODIES

Descriptive Note:

Research memo.

Personal Author(s):

LYKOUDIS, PAUL S

Report Date:

Jan 1963

Media Count:

65 Page(s)

Report Number(s):

RM-3270-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0295128

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /U2/295128.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD295128>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) SUBURBANIZATION OF EMPLOYMENT AND POPULATION 1948-1975
Personal Author(s):
NIEDERCORN, JOHN H
KAIN, JOHN F
Report Date:
Jan 1963
Media Count:
42 Page(s)
Report Number(s):
XC-USAFA
Monitor Series:
USAFA
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0293124
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE DEMAND FOR TRANSPORTATION SERVICES IN A GROWING ECONOMY
Personal Author(s):
ZWICK,CHARLES J
Report Date:
10 Dec 1962
Media Count:
1 Page(s)
Report Classification:

Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0294320
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE INCOHERENT SEQUENTIAL DETECTION OF A SINE WAVE IN WHITE NOISE
Personal Author(s):
SELIN,IVAN
Report Date:
Dec 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0294319
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THAILAND
Personal Author(s):
WILSON,DAVID A
Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291613

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE AMERICAN PEACE MOVEMENT: A STUDY OF ITS THEMES AND POLITICAL POTENTIAL

Personal Author(s):

WESSEL,A E

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Contents: Introduction Why study the peace movement The approach to the study The public debate Herman Kahn and his critics Some reasonable concerns The growth of the peace movement The changing popular attitudes toward war The spread of the peace movement themes The entry into politics The peace movement and military strategy

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0294703

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/294703.pdf

Size: 521 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD294703>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SPECULATIVE CONSIDERATION ON HIGH-FREQUENCY INSTABILITY OF THE LAMINAR BOUNDARY LAYER AND ITS EFFECT ON THE DESIGN OF STABILIZING COATINGS

Personal Author(s):

KRAMER, M O

Report Date:

Dec 1962

Media Count:

18 Page(s)

Report Number(s):

RM-3284-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution unlimited

Abstract:

(U) Recent theoretical work indicates the possibility of a high-frequency instability of the laminar boundary layer. Recent experimental findings provide evidence for the existence of a high-frequency instability of the laminar boundary layer. The critical frequency of the experimentally indicated high-frequency instability is approximately 40% of the freestream velocity divided by the laminar-boundarylayer thickness or about 25 times the most critical frequency of the Tollmien-Schlichting waves. The wave length of the high-frequency instability is about 1.9 times the laminarboundary-layer thickness or approximately 1/8 the wave length of the most critical TollmienSchlichting waves. The eddies resulting from the high-frequency instability are spaced much closer to the surface than to each

other, which makes the damping of the high-frequency instability of the laminar boundary layer by an appropriate stabilizing coating a promising possibility. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0292077

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GALACTIC COSMIC RADIATION AND MANNED SPACE FLIGHT

Personal Author(s):

TAMPLIN,A R

FISHER,H K

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion of the flux and composition of primary cosmic particles of galactic origin is presented, together with a discussion of the processes through which these particles may transfer energy to biological specimens. The biological effects of primary cosmic particles are estimated on the bases of both dosage and pseudo-target theory. The dosage was estimated according to the method of Tobias wherein it is assumed that all particles that enter the body are stopped within the body without undergoing nuclear collision and fragmentation. As such, this estimate is an upper limit for the dosage and corresponds to 0.07 rem/day. The pseudotarget-theory approach was based upon the consensus of radiobiologists that the only significant biological effect of primary cosmic particles will be injury to the neurons of the nervous system, since these neurons cannot be replaced. Using assumed values of kill cross sections and the measured flux of primary cosmic particles, it was possible to estimate that the fraction of neurons that might be killed as a function of exposure time is on the order of 1% in 100 days. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293264

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MEASURE FOR CRACKPOTS

Personal Author(s):

GRUENBERGER,FRED J

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293256

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MINIMAL WEIGHT DESIGN FOR A BUILT-IN BEAM

Personal Author(s):

GROSS,OLIVER

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293423

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYTICAL STUDY OF THE PERT ASSUMPTIONS

Personal Author(s):

MACCRIMMON,K R

RYAVEC,C A

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0292068

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REACTIONS OF HEMOGLOBIN AND STEADY STATES IN THE HUMAN RESPIRATORY SYSTEM: AN INVESTIGATION USING MATHEMATICAL MODELS AND AN ELECTRONIC COMPUTER

Personal Author(s):

DEHAVEN,JAMES C

DELAND,EDWARD C

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Using thermodynamic principles relating to steady-state processes, a detailed biophysicochemical model of the human external respiratory subsystem was constructed. Mathematical experiments performed with this model give good agreement with reported physiological data relating to the functioning of this subsystem under normal and some abnormal conditions. The model was applied to the representation of the exchanges of respiratory gases and related chemical phenomena occurring between the venous and arterial sides of the total air-blood system. In addition, the model was used to explore the quantitative as well as the qualitative significance of biochemical functions that are believed to be important in establishing the characteristics of the system. These functions include the Bohr effects of hemoglobin and various hypotheses of carbamino formation, as well as the dynamic steady-state gradients imposed by the erythrocyte metabolic pump and the disparate concentrations of nondiffusible species operating across the cell membranes. (Autho)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0292109

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/292109.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD292109>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME PROBLEMS OF BASIC ORGANIZATION IN PROBLEM-SOLVING PROGRAMS

Descriptive Note:

Memorandum rept.

Personal Author(s):

NEWELL, ALLEN

Report Date:

Dec 1962

Media Count:

69 Page(s)

Report Number(s):

RAND/RM-3283-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution unlimited.

Abstract:

(U) Several examples of organizational problems dealing with the construction and application of problem-solving programs are examined. The first example is how to store information that is created dynamically and unpredictably during the operation of the program. The second example is how to organize large, complex processes. The third example is how to have many different kinds of goals producing many different kinds of results, and yet be able to use these results in the rest of the problem. The fourth example is how to avoid the rigidities of many special routines when building up highly particular and inhomogeneous collections of data. The last example concerns the general problem of how to remember the past. All of these problems stem from the fact that problem-solving programs are more dynamic and require more flexibility than we know how to provide. By solving these organizational problems in this context we can expect to develop the appropriate ways to organize complex programs that require flexibility in many applied areas as well.

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0292168

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANATOMY OF AN ASSEMBLY SYSTEM

Personal Author(s):

MEALY,GEORGE

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Generalized Assembly System (GAS) combines a number of features which have either been talked about in the past or have actually appeared in one form or another in working assemblers. The motivation for designing GAS is threefold. First, combining these features in one system, while desirable in itself, will provide a far more powerful assembly mechanism than any which is currently available. Second, mechanisms within GAS already provide a large part of what is needed to construct translators; one should capitalize on this fact by designing translators as the top level of the assembly system rather than as self-contained entities or preprocessors. Third, GAS is intended to be as much a research tool as it may be a practical assembly system for everyday use. A general description is presented of both the GAS language and the organization of the GAS processor. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0292169

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) REVIEW OF BOOK PLANETS AND SATELLITES
Personal Author(s):
KELLOGG,W W
Report Date:
Dec 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0292125
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON PERFECT ERROR-CORRECTING CODES
Personal Author(s):
JOHNSON,SELMER
Report Date:
Dec 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) DESCRIPTORS: *Digital recording systems, *Magnetic recording systems, Magnetic tape, Digital systems, Electronic circuits, Electronic equipment, Design, Computers, Printing. Low velocity magnetic data readout and techniques for magnetic tape digital recording and playback over a 7500 - 1 speed range are investigated. The report covers four main areas: specifications, block diagram, tape transport, and preliminary laboratory investigation. Tentative specifications are made of the magnetic tape unit to be used for experimentation and demonstration of the techniques under investigation. The unit consists

of a tape transport and associated electronics for recording and playback with teletypewriter equipment. The block diagram is given and discussed for each of four modes of operation. These modes are low-speed record, high-speed playback, high-speed record, and low-speed playback. requirements are discussed for the tape transport including the parameters of available units and factors used in selecting the best transport. A description of the testing planned during the preliminary laboratory investigation is given. This description includes specific testing of the tape transport, flux responsive circuit for use in low-speed playback, and playback-record techniques exclusive of logic circuitry. 9autho)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0294119

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AUTOSATE: PART II. EVENT-CHAIN FLOW CHARTING

Personal Author(s):

GATTO, O T

FAIRBROTHER, E M

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An automated technique which provides information on data system flows and characteristics at the expenditure of considerably less manpower and in a more usable form than was previously possible was described previously in AD-275 499. The event-chain flow charting phase of that technique and the results of a field test of a proposed depot maintenance data system using the event-chain procedures are described. Also included are the computer program flow charts and Fortran instructions. Material presented should be of special interest to those in the Directorate of Data Automation at Hq USAF; to the Systems Command, and to others who will conduct data system studies. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293435

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE FOUNDATIONS OF RELATIVISTIC CONTINUUM MECHANICS

Personal Author(s):

EDELEN,DOMINIC G B

Report Date:

Dec 1962

Media Count:

38 Page(s)

Report Number(s):

RM-3392-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Einstein theory of general relativity is shown to yield a general mechanics of continuous media under appropriate restrictions of the momentum-energy tensor. Physical interpretations of the governing equations are derived, and constitutive relations are developed for general and isotropic materials. It turns out that under rather general circumstances, the relativistic continuum may be interpreted as a space filled by a flow of rest energy. Invariant requirements for the existence of a stress potential are obtained, the satisfaction of which leads to a decomposition and partial evaluation of the rest energy. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293693

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/293693.pdf

Size: 387 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD293693>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INTERNAL CONDUCTIVITY OF ESCHERICHIA COLI

Descriptive Note:

Technical manuscript no. 23

Personal Author(s):

CARSTENSEN, EDWIN LORENZ

Report Date:

Dec 1962

Media Count:

12 Page(s)

Report Number(s):

XA-ABL/MD

Monitor Series:

ABL/MD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Preliminary experiments on the high frequency (100 and 250 megacycles) internal conductance of Escherichia coli are reported. Observations indicate a difference in conductivity at the two frequencies, which is presumed to be a property of the macromolecules composing the cells. The effect of washing on internal conductivity was investigated by a single set of experiments that indicated definite loss of internal conducting material with washing, the percentage loss per wash decreasing after the third wash, and surprising behavior after seven to nine washes, indicating either a change in cell permeability or osmotic response.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293832

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUPPORT REQUIREMENTS FOR OPPORTUNISTIC REPLACEMENT AND INSPECTION POLICIES

Personal Author(s):

MCCALL,J J

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Requirements of opportunistic replacement inspection policies are examined: the expected number (per unit time) OF OPPORTUNISTIC (joint REPLACEMENTS OF THE UNINSPECTED PART AND THE MONITORED PARTS; THE EXPECTED NUMBER (PER UNIT TIME) OF PLANNED REPLACEMENTS OF THE UNINSPECTED PART; THE PROBABILITY OF A CERTAIN NUMBER OF FAILURES OF A MONITORED PART IN A SPECIFIED INTERVAL OF TIME; THE EXPECTED NUMBER (PER UNIT TIME) OF OPPORTUNISTIC INSPECTIONS -- INSPECTIONS OF THE NON-MONITORED PART WHICH ARE TRIGGERED BY FAILURES OF THE MONITORED PART; AND THE EXPECTED NUMBER (per unit time) of planned inspections of the non-monitored part. As an example the opportunistic replacement policy is applied to the rocket engines of a hypothetical ballistic missile. This illustrative analysis indicates that both the expected number (per unit time) of opportunistic (joint) replacements of the rocket engines and re-entry vehicle and the expected number (per unit time) of replacements of the rocket engines due to mandatory replacement are highly sensitive to changes in the rocket engine failure rate. The expected number (per unit time) of opportunistic (joint) replacements of the rocket engines and the guidance and control system is relatively unaffected by change in the engine failure rate. (Author)

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0293864

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPARISON OF MONTE CARLO CALCULATIONS WITH EXPERIMENTAL RESULTS FOR THE
PROPAGATION OF GAMMA RAYS NEAR AN AIR-GROUND INTERFACE

Personal Author(s):

MARCUM,J I

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The RAND gamma ray Monte Carlo code is used to predict dosages from point isotropic monoenergetic sources of 1.28 Mev and 0.661 Mev near an air-ground interface. These results are compared with experimental results for identical geometry obtained by the Nuclear Defense Laboratory. In general, the agreement between the Monte Carlo estimates and the experimental results is quite good. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293865

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONNECTIVITY OF A BROADCAST STATION NETWORK

Personal Author(s):

LINDHOLM,C R

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A redundant network consisting of AM broadcast stations is postulated and examined computationally for connectivity under normal and severe propagation and noise conditions. The postulated network was chosen according to conservative ground rules in such a way as to illustrate commercial communication facilities likely to survive an attack on the USZI. Results of the analysis are displayed in a series of maps. This type of network appears feasible for transmission of a few teletype channels even under worst noise conditions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291803

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON A HYPERSONIC TALL-SHOCK PROBLEM

Personal Author(s):

MEYER,R E

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The formation of a shock by a steady gas stream converging toward an axis of symmetry is investigated. The flow is assumed to be a conical field with vertex at the point where the inner boundary of the stream first reaches the axis and where the shock starts. A detailed treatment is given for the case where the flow downstream of the shock is uniform, axial, and of large Mach number M , so that the semivertex angle τ of the shock is small, but $M \tau$ is not. It is also assumed that the shock is at least fairly strong. An additional small parameter then appears, and a uniform first-order approximation with respect to it is derived. The streamlines are found to be nearly straight and parallel, but the gas is found to suffer a precompression, upstream of the shock, such that the inner boundary of the inviscid gas stream is a vacuum line. Similarly, vacuum is approached asymptotically on all streamlines with distance upstream from the shock. It is shown that the result concerning the occurrence of vacuum must be expected to be independent of all but one assumption--that the gas impinges on the axis at a non-zero angle. Accordingly, tail-shock formation in two-dimensional and axially symmetrical flows must be expected to differ in significant, still-unknown ways. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293801

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ARMY COST MODEL

Personal Author(s):

GROSSE, R N

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A description of the Army cost model, which has been under development since the end of February 1962, is presented. This cost model is to be used for rapid cost estimating of alternative forces for use in cost-effectiveness studies and for projecting approximate budget sizes. In the development of this

model, a determination was first made as to the kinds of outputs the model should have. In general these outputs were made compatible with those of the OSD programming system. The model was then structured to simulate Army processes in a simplified manner, the structure being based on an intensive study of the organization, policies, and procedures of the Army. This memorandum then describes the data needed to develop the many inputs required for the model. Finally, a highly summarized schedule is presented on the over-all development work. This schedule is broken down into five categories: research, documentation, programming, testing and operations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293440

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STRESS POTENTIALS, PATH DENSITIES AND RELATIVISTIC THERMODYNAMICS

Personal Author(s):

EDELEN, DOMINIC G B

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0292170

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ECONOMETRIC MODEL OF METROPOLITAN DEVELOPMENT

Personal Author(s):

NIEDERCORN,JOHN H

KAIN,JOHN F

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Regional and urban economics have not yet accorded econometric models the same wide acceptance that they now enjoy in Economics. The econometric technique appears to be a useful and efficient tool for studying regions. This method has been applied to the study of urban land-use problems. Presented is a dynamic crosssectional econometric model describing population and employment changes which have taken place in the 39 largest Standard Metropolitan Statistical Areas (SMSAs) during the 1954-1958 period. Our present urban structure analysis proceeds in several discrete steps. First, we determined changes in population and manufacturing employment for the entire SMSA. These changes, representing perhaps the most important kind of basic employment, are partitioned between the Central City and the Metropolitan Ring. Finally, changes in retailing, wholesaling and selected service employments are derived for both the Central City and Metropolitan Ring. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0294704

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PRODUCT THEOREM FOR HILBERT TRANSFORMS

Personal Author(s):

BEDROSIAN,E

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A mathematical theorem is presented for finding the Hilbert transform of a product of functions in a simplified fashion, under certain conditions. Engineering applications are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0295651

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/295651.pdf

Size: 3 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD295651>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRELIMINARY CODES AND RULES FOR THE AUTOMATIC PARSING OF ENGLISH

Personal Author(s):

ROBINSON, JANE J

Report Date:

Dec 1962

Media Count:

148 Page(s)

Report Number(s):

XC-DCSRTAF-DDP

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A set of grammar codes and rules for analyzing, or parsing, English sentences automatically on a digital computer is presented. The introduction briefly discusses the nature of parsing and the general model of English structure on which this approach is based, and the codes and rules are discussed in detail. Although the computer program is not explained at length, the logic underlying it is illustrated in the discussion of the rules. A complete list of the rules written so far and a sample output of parsed sentences are appended. The linguist and the programmer will find the presentation sufficiently detailed so that they can add to, refine, or modify the codes and rules, and design programs for applying them to text.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291088

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SURVEY OF CERTAIN ASPECTS OF THE MATHEMATICS OF CONTROL PROBLEMS

Personal Author(s):

BERKOVITZ,L D

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0289007

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAGNETO-FLUID-MECHANIC BLAST WAVES IN A MEDIUM WITH FINITE ELECTRICAL CONDUCTIVITY

Personal Author(s):

LYKOUDIS,PAUL S

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Number(s):

RM-3125-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The classical theory of blast waves is extended for the case of an electrically conducting medium in the presence of a magnetic field. The general case is presented in which waves are generated by the sudden release of energy in a plane (piston problem), line (cylindrical symmetry), or point (spherical symmetry). The medium is assumed to possess electrical conductivity varying with an appropriate power of temperature, whereas the mass-density distribution of the medium in the undisturbed region and the imposed magnetic field ARE ALLOWED TO BE POWER FUNCTIONS OF THE SPATIAL COORDINATE. The case of cylindrical symmetry with a constant density in the undistorted fluid region and a constant magnetic field parallel to the cylindrical wave is discussed in detail. It is found that the magnetic field decelerates the fluid behind the shock wave, producing at the same time higher temperatures. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0289006

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXCAVATION OF THE WUPATKI BLOWHOLE SITE. NA7824,

Personal Author(s):

SCHLEY,R A

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Excavation of the Wupatki Blowhole site revealed four occupation areas within a 120-m area. Ceramics, petroglyphs, masonry, and other evidence suggest a twelfth-century occupancy. That the nearby blowholes affected the inhabitant's choice of sites seems unquestionable, but further excavations should be undertaken, both to clarify this point, and to gain a variety of ecological and geochronological data. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606509

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COMBINATION OF ALTERNATIVE RESEARCH TECHNIQUES IN LOGISTICS SYSTEMS ANALYSIS,

Personal Author(s):

Geisler ,Murray A

Steger,Wilbur A

Report Date:

Nov 1962

Media Count:

24 Page(s)

Report Number(s):

P-2660

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to examine the nature of systems analysis, and past experiences with it, to help develop a strategy for selecting appropriate techniques. To facilitate the development of this strategy, several categorizations are developed: (1) of the characteristics of the kinds of systems studied by systems analysts; (2) of the many purposes of systems analysis; and (3) of the attributes of many systems analysis techniques. Then the simulation category is examined further with a more detailed breakdown presented on the spectrum of simulation techniques. Finally, an illustration is given of the way in which the various systems analysis techniques have been used to evolve a greater understanding of supply and inventory policies and systems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0288907

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROPERTIES OF MATTER UNDER HIGH STRESS THERMODYNAMIC DESCRIPTIONS

Personal Author(s):

BRODE, H L

SMITH, A C

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Although solids behave elastically at very low stress levels, and exhibit complex visco-elastic and plastic behavior at higher stress levels, when stresses in the megabar range are applied, it is generally more meaningful to ignore stress tensor descriptions and turn to thermodynamic and fluid dynamic descriptions. At high enough stress levels the response of any material must be viewed as characteristic of a compressible fluid. Some empirical information is available in the regions of stress of a few kilobars to a few megabars from high explosive shock experiments. Static compression data are useful guides at lower stresses, while at the highest levels one finds the properties are reasonably well determined by atomic models such as a FermiThomas-Dirac temperature-dependent model. Theoretical calculations, numerical in nature, have provided the thermodynamic properties of all atomic elements. The properties of chemical mixtures as occur in natural materials can be constructed from suitable combinations of these elementary results. Successful use has been made of such results for calculations of dynamic response under high impulse loadings in a variety of applications. One particular example (for basalt) is illustrated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0288821

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RADIO WAVE ABSORPTION DUE TO ELECTRON-ION COLLISIONS IN THE EARTH'S ATMOSPHERE
ABOVE 100 KM

Personal Author(s):

CRAIN,C M

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0289041

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON ASME PAPER NO. 62-WA-181: HEAT-TRANSFER AND FORCES FOR FREE-MOLECULE FLOW ON A CONCAVE CYLINDRICAL SURFACE

Personal Author(s):

SCHAMBERG,R

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0289508

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMAL ALTITUDE FOR ANTIMISSILE DETONATIONS. A GAME THEORY ANALYSIS

Personal Author(s):

KITCHEN,J W JR

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This memorandum treats a situation where an ICBM plunges toward a target defended by one or more AICBM missiles. It is assumed that if the defender identifies the ICBM and scores a hit within the lethal radius of the AICBM before the ICBM detonates, the ICBM does no damage. If the ICBM detonates first, however, it does an amount of damage that depends on the height of the detonation. The defender has a dilemma. If he tries to knock out the ICBM at a great height, he is less likely to identify and kill it than if he waits until it is lower. On the other hand, if he waits until it is low, it may explode before he attacks it, at an altitude low enough to produce severe damage. The attacker must decide at what altitude he will detonate the ICBM. The defender does not pick the same altitude to detonate his weapons everytime, since then the attacker would detonate the ICBM always just a little above that altitude. Thus the strategies involve random selection of altitudes for both the attacker and the defender. The best strategies for both the attacker and the defender are found, first for the case where there is just one defense missile, and then for the case of multiple defense missiles. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0289507

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPPORTUNISTIC REPLACEMENT OF A SINGLE PART IN THE PRESENCE OF SEVERAL MONITORED PARTS

Personal Author(s):

RADNER,ROY

JORGENSEN,DALE W

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The significance of this memorandum is that it presents a rigorous mathematical proof of the optimality of a class of policies for replacement of a single randomly failing part in the presence of any number of monitored parts. The previously-cited memoranda used these policies in a series of applications, but they did not give the necessary proof of optimality. Since the mathematical proof contained in this memorandum is theoretically important, it will ALSO BE PUBLISHED IN A SUITABLE SCIENTIFIC JOURNAL, AND IT IS EXPECTED THAT ITS DISSEMINATION WILL ENCOURAGE FURTHER WORK ON MAINTENANCE POLICIES, COVERING BOTH REPLACEMENT AND INSPECTION, BY THE INCREASING NUMBER OF SCIENTIFIC ORGANIZATIONS CONCERNED WITH THESE LOGISTIC PROBLEMS. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291805

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GENERAL NEURAL NET

Personal Author(s):

PAXSON,E W

SMITH,J W

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A neural net is discussed which is general in that (1) connectivity and transmission times along links are at the pleasure of a net's constructor, (2) time is not quantized (except as demanded by the grain of the computation), (3) eight of the synaptic mechanisms distinguished by Bullock are permitted, and (4)

the assisted synaptic learning theory of Milner is included. The net has been coded for the IBM 7090.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0288635

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON HAMILTON'S EQUATIONS AND INVARIANT IMBEDDING

Personal Author(s):

BELLMAN,RICHARD

KALABA,ROBERT

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606410

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INDUSTRIALIZATION AND ECONOMIC UNION IN GREATER EAST AFRICA,

Personal Author(s):

Massell,Benton F

Report Date:

Nov 1962

Media Count:

8 Page(s)

Report Number(s):

P-2643

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Economic decisions facing East African policy-makers can be viewed in terms of three alternatives: (1) Economic separation; (2) Continuation of the existing East African Common market, possibly with a more extensive coordination of economic activities among the three territories (Kenya, Tanganyika, and Uganda); and (3) Extension of the common market to include some of the neighboring countries.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0292149

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETERMINATION OF DISPLACEMENT OF DRY CARGO SHIPS IN THE EARLY DESIGN STAGES

Personal Author(s):

DANCKWARDT,ERICH C M

BENFORD,H B

KRAMER,M O

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This effort is based on work that was pursued with the object of developing a method that would show the main dimensions of any projected ship during the early design stages. The approach explained is completely novel. The reported methods and the determination of the correction factors that go with it can be used for many other preliminary design cases and can furnish valuable information in these cases as well. The method is based on the separation and individual treatment of the various weight groups such as steel outfitting and machinery. These individual weights were determined as functions of the design requirements. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604803

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAN'S ROLE IN SPACE,

Personal Author(s):

DALKEY,N C

Report Date:

Nov 1962

Media Count:

12 Page(s)

Report Number(s):

P-2669

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The reasons for sending human beings into space are discussed. Man's skills and innate capabilities are viewed as being superior to those of machines in exploration.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606408

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYSTEM CONSIDERATIONS IN REGIONAL INFORMATION EXCHANGE,

Personal Author(s):

Hearle,Edward F R

Report Date:

Nov 1962

Media Count:

11 Page(s)

Report Number(s):

P-2662

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The widespread interest in improved systems for regional exchange of health, medical and welfare information arises for two major reasons. First it appears that substantial advances in both research and patient care might be achieved if the volumes of valuable data buried in files of health, medical, and welfare agencies were more accessible. Second, electronic devices offer real promise of making better access to such data technologically feasible. This paper expands on both of these reasons and explores some of the considerations in designing systems for regional information exchange.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606409

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIMULATION: AN INTRODUCTION FOR ANTHROPOLOGISTS,

Personal Author(s):

Hays,David G

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Number(s):

P-2668

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Anthropologists will not use simulation when other techniques are adequate, but when simulation is the only possible technique available two questions remain: technological feasibility and validity. There seem to be situations in the field that require simulation, and at least a useful scale of simulation seems to be feasible if the anthropologist is willing to learn certain skills, obtain certain help, and procure certain equipment--all within his means. The crudest form of the validity question, whether any laboratory study can obtain results at all comparable with those of field studies, has not been answered very well, but seems to be answered affirmatively. It remains for the anthropologist to question validity whenever he uses simulation, or any other method whatsoever.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0288235

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PROOF OF A FIXED-POINT THEOREM OF KAKUTANI

Personal Author(s):

KITCHEN,J W JR

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The objective of this analysis is to give an elegant and conceptually interesting proof of a fixed-point theorem of Kakutani, and to elucidate the intimate connection between this theorem and the existence of Haar measure on a compact group. The only difficult point in the discussion is the construction of an appropriate integral, and even here the arguments are essentially a duplication of familiar arguments in the theory of the elementary Riemann integral. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291582

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CONTRIBUTION TO THE URBAN TRANSPORTATION DEBATE: AN ECONOMETRIC MODEL OF URBAN RESIDENTIAL AND TRAVEL BEHAVIOR

Personal Author(s):

KAIN,JOHN F

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some systematic empirical information is presented on the questions of diversion from automobile to transit and the interrelationships between urban transportation and residential land-use development. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0290614

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USE OF SOVIET MILITARY LABOR IN THE CIVILIAN ECONOMY. A STUDY OF MILITARY SHEFSTVO

Personal Author(s):

KOLKOWICZ,R

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) There are presumably various sources of tension between the Communist party and the professional officers in the armed forces. The dissatisfaction of the military with some aspects of shefstvo represents therefore only one dissatisfaction among many. In the past the party at least tolerated the resistance raised by the military against interference with their training and readiness activities; it did nothing to appease the military. In the past few months, military demands for more resources and less interference in their training activities have been given public prominence and the party has also made several conciliatory gestures. This turn of events may indicate that though the party at one time viewed the role of the conventional forces as rather limited, recent international political and military developments may have caused Khrushchev to yield to pressure from the military. In view of this, it is likely that the uses of military labor in civilian economic establishments may be curtailed (since they interfere with training and readiness) and that the role of the conventional forces may be upgraded. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0290951

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DERIVATION OF ESTIMATING RELATIONSHIPS: AN ILLUSTRATIVE EXAMPLE

Personal Author(s):

FISHER,G H

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) ILLUSTRATIVE EXAMPLES OF HOW STATISTICAL REGRESSION ANALYSIS MAY BE USED TO DERIVE ESTIMATING RELATIONSHIPS FROM HISTORICAL DATA ARE PRESENTED. The specific illustration pertains to estimating relationships for airframe initial tooling cost as a function of aircraft performance and physical characteristics. Examples of simple linear regression, logarithmic linear regression, second degree regression, and multiple linear regression analyses are presented and discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291717

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HEAT EXCHANGE WITH A FLOW OF A RAREFIED GAS ALONG A WALL

Personal Author(s):

GAZLEY,JOY B

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291718

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A THIN AIRFOIL WITH A MINIMUM AVERAGE COEFFICIENT OF HEAT TRANSFER FOR A GIVEN LIFT

Personal Author(s):

GAZLEY,JOY B

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0290615

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FIFTH RAND COMPUTER SYMPOSIUM

Personal Author(s):

GRUENBERGER, F J

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum is an expurgated transcript of the Fifth Annual RAND Computer Symposium, held at The RAND Corporation, April 1962. The idea for these symposia grew out of the observation that much of the value of computing industry conferences comes from the informal conversations which take place in hotel rooms and conference corridors. The feeling that an organized "bull session" might be a worthwhile endeavor led to the invitation of some 20 individuals to come to RAND for a full day of discussion on common problems in the computer field. These sessions have been held annually since 1958 on the day just prior to the Western Joint Computer Conference. The Symposium is, in effect, a meeting of individuals prominent in the industry. The discussion during the fifth symposium centered around the topic, 'Pros and Cons of Common Languages,' with special consideration being given to use by the military of Command and Control languages. Because this topic is of special interest to the US Air Force and the computing field in general, the transcript of the 1962 Symposium is being released as a RAND Memorandum. An article based on this transcript appears in the October and November 1962 issues of Datamation magazine. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291716

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HEAT AND MASS EXCHANGE WITH COOLING OF STRONGLY HEATED SURFACES BY EVAPORATION

Personal Author(s):

GAZLEY,JOY B

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291191

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMAND AND CONTROL--A GLANCE AT THE FUTURE

Personal Author(s):

DALKEY,N C

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291804

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ELEMENTARY CORTICAL CYLINDER

Personal Author(s):

PAXSON,E W

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A simple initial model designed to check out the 7090 program for neural nets (see RM-3406-PR) is described and the results of computation given. The model is grossly analogous to a small cylinder through the cortex. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0290532

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/290532.pdf

Size: 688 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD290532>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOUTHERN CALIFORNIA IN A THERMONUCLEAR WAR

Personal Author(s):

BRODE, HAROLD L

Report Date:

Nov 1962

Media Count:

15 Page(s)

Report Number(s):

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0290472

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON INCREASING THE OPERATING LIFE OF UNATTENDED MACHINES

Personal Author(s):

REED,I S

BRIMLEY,D E

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0289852

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON ASYMPTOTIC BEHAVIOR OF DIFFERENTIAL EQUATIONS

Personal Author(s):

BELLMAN,RICHARD

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The asymptotic behavior of solutions of the equations $u'' - (1 + f(t))u = 0$ has been extensively investigated. It is of interest, however, to present a new method which is quite easy to apply and which seems capable of yielding a number of useful results. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0289613

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE THERMODYNAMIC PROPERTIES AND SHOCK-WAVE CHARACTERISTICS OF A MODEL VENUS ATMOSPHERE

Personal Author(s):

STRAHLE, W C

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A model for the atmosphere of Venus is developed which may be useful for design studies of early atmospheric-entry vehicles and for wind-tunnel simulation application. This atmosphere, derived from many questionable assumptions and scant experimental data, consists of 85% carbon dioxide and 15% nitrogen by volume. The thermodynamic properties of the derived atmospheric composition are presented over the temperature-pressure range of 150 to 24,000 K and 1/10,000 to 100 atm. To further assist in aerodynamic entry calculations, normal-shock-wave characteristics of such an atmosphere are also presented. The fact that nitrogen is present has important consequences in the thermodynamic properties and electron concentrations over the full temperature and pressure range. The effects are of the order of the percentage of nitrogen addition to pure carbon dioxide. A graphical method of obtaining oblique-shock-wave data and a method of obtaining electron concentrations at low temperatures are included as appendixes. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0289851

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROGRAM BUDGETING. LONG-RANGE PLANNING IN THE DEPARTMENT OF DEFENSE

Personal Author(s):

NOVICK, DAVID

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Number(s):

RM-3359

Contract Number:

SD-83

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A new planning and programming process is described that was initiated within the Department of Defense in early 1961. Planning is considered in long-range terms of missions, forces, and weapon systems, i.e., resource outputs, rather than in terms of the standard appropriation categories of procurement, construction, personnel, etc., i.e., resource inputs. In the course of budget review, the need for quick decisions, with their obvious drawbacks, on major programs has been reduced considerably. The new process incorporates an up-to-date, five-year force structure and financial program, expressed in terms of forces, manpower, and dollar requirements. In this system, approval thresholds are established to concentrate attention on the major current or prospective issues, this being an obvious application of "management by exception." These thresholds are in terms of total obligational authority requirements, for the current or budget fiscal year and on a total basis. A progress reporting procedure for about 200 of the most important materiel items is employed. Milestone schedules are established to reflect the events and activities upon which the financial plan is based.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0290236

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE INFLUENCE OF CONSTANT DISTURBING TORQUES ON THE MOTION OF GRAVITY-GRADIENT STABILIZED SATELLITES

Personal Author(s):

GARBER,T B

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The effect of a constant disturbing torque upon the transient response of a gravity-gradient stabilized body is demonstrated. It is assumed that the satellite is on a circular orbit. Thus the oblateness and other asymmetries of the earth are neglected. The only torques which act on the body are those due to the gravity gradient, and the constant disturbance. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0290516

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE EXISTENCE AND UNIQUENESS OF INTRINSIC ENERGY IN GENERAL RELATIVITY

Personal Author(s):

EDELEN, DOMINIC G B

Report Date:

Nov 1962

Media Count:

18 Page(s)

Report Number(s):

RM-3379-PR

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) IT IS SHOWN THAT THE Einstein field equations uniquely determine an intrinsic energy density in any region of space-time which is occupied by a material medium. The usual procedure of adding conditions to the Einstein theory in order to obtain an analogous intrinsic quantity is thus unnecessary. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291168

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TURBULENT FRICTION ON A FLAT PLATE IN THE SUPERSONIC FLOW OF A GAS

Personal Author(s):

GAZLEY,JOY B

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0292909

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE OXNARD BASE MAINTENANCE MANAGEMENT IMPROVEMENT PROGRAM

Personal Author(s):

BELL,CHAUNCEY F

SMITH,T C

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The study's primary objective was to accurately identify the maintenance generated by operational requirements, both in the amount of work and the time at which it was required. Such an identification is necessary in order to evaluate flying schedules, estimate the resulting workloads, and plan work schedules to minimize overtime. It was hoped that use of improved information would also improve the organization's alert posture, assist in establishing and justifying personnel requirements, and improve the accuracy and completeness of the data. This report (prepared as a briefing for presentation at several ADC locations as well as Hq. USAF) reviews the results and efforts to date. It demonstrates the feasibility of the data acquisition and processing; answers key questions posed by Oxnard management personnel; and explains and demonstrates several of the graphic displays developed to assist in base management action. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293869

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE POTENTIALITIES OF DECEPTION AS A SURVIVAL AID FOR A RETALIATORY MISSILE FORCE

Personal Author(s):

WILDHORN, SORREL

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293863

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AIRCRAFT AIRFRAME COST ESTIMATING TECHNIQUES

Personal Author(s):

CARRIER,J M

SMITH,R W

Report Date:

Nov 1962

Media Count:

59 Page(s)

Report Number(s):

RM-3375-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An introduction to cost estimating techniques, specifically those applying to aircraft airframes are described. Each major cost element, e.g. labor, materials, etc., is treated, and a procedure is presented for estimating both nonrecurring and recurring airframe costs. This procedure is described as a series of steps which theoretically lead to the correct answer. As experienced estimators will realize, every estimating situation is different and what is intended to be an illustrative procedure should be used with discretion in making actual estimates. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607360

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE GREAT STATISTICS OF WARS 'HOAX',

Personal Author(s):

Haydon,Brownlee

Report Date:

Nov 1962

Media Count:

9 Page(s)

Report Number(s):

P-2661

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An article on the statistics of wars throughout the ages, which has appeared in various articles in several different countries, is exposed as a fantasy.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0295561

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/295561.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD295561>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:
(U) THE DSA AND MILITARY LOGISTICS
Personal Author(s):
Piekarz, R
Report Date:
Nov 1962
Media Count:
44 Page(s)
Report Number(s):
RM-3188-PR
XC-DCSRTAF-DDP
Contract Number:
AF 49(638)-700
Monitor Series:
DCSRTAF-DDP
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0609757
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) AUTOMOBILES; TODAY AND TOMORROW,
Personal Author(s):
Hoffman, George A
Report Date:
Nov 1962
Media Count:
89 Page(s)
Report Number(s):
RM-2922-FF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum describes the general characteristics of modern automobiles and explores their possible future traits. The present-day passenger car is analyzed by decomposing it into its basic components, such as the body, trim, and engine, and a linear relation is established between each component and over-all vehicle weight. Also categorized are other general properties, both linear with weight, such as capacity, payload, fuel utilization, and economy, and nonlinear, such as dimensions, power utilization, performance, and vehicle utilization. Each of the above components and characteristics is then examined regarding its future possibilities, with not only technological developments but also economic and public-acceptance constraints in mind. From this last analysis, the vehicle of the 1970's is reconstructed into its probable composition, with interactive trends and other factors being computed where possible. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0650433

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EUROPEAN COMMUNITY AND THE SOVIET BLOC,

Personal Author(s):

Mendershausen,Horst

Report Date:

Nov 1962

Media Count:

25 Page(s)

Report Number(s):

P-2577-2

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The European Common Market is a matter of political importance. The communist movement finds it necessary to announce an orthodox position on all matters of political importance, and thus to coordinate the language and the efforts of the faithful. In order to assess the reaction of the Soviet empire to the European Community, the doctrinal proclamations of the ruling party are examined. The party's explanation of Europe's unification is discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0650426

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/650426.pdf

Size: 864 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD650426>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DETERRENCE AND DISARMAMENT

Descriptive Note:

Revised ed.

Personal Author(s):

Ferguson, Allen R

Report Date:

Nov 1962

Media Count:

23 Page(s)

Report Number(s):

RAND-P-2553-1

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Deterrence and disarmament both relate to preserving in a dangerous world the nation, peace, and the possibility of freedom. They are complementary, not conflicting, policies for coping with the conflict between the free world and the Communist Bloc. If they are pursued with wisdom and force they may buy some decades in which to cope with basic problems. If central war can be avoided, perhaps we can accomplish some genuine reduction in the fundamental hostility between the Bloc and the relatively free nations-- without the loss of freedom. There is no clear causal link between disarmament and the fundamental source of danger of war. There is none between deterrence and that source. The threat of general war stems basically from a conflict of objectives backed by power. Any approach to the essential problems of war and peace must address that conflict.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0726036

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Growth of Operations Research in Italy,

Personal Author(s):

Stoller,David S

Report Date:

Nov 1962

Media Count:

15 Page(s)

Report Number(s):

P-2659

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The past and present extent of Operations Research activities in Italy are discussed. Several factors related to the growth of Operations Research activities in the educational, industrial, governmental, and military sectors of the Italian economy are identified. The future prospects for the Operations Research profession in Italy are evaluated. (AUTHOR)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0610834

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHAT IS DETAB-X.

Descriptive Note:

Memorandum,

Personal Author(s):

Pollack,Solomon L

Report Date:

Oct 1962

Media Count:

27 Page(s)

Report Number(s):

P-2608-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Air Force, like many other large users of computers, continually seeks to reduce its computer programming staffs, costs, and time-lags. Toward this end, it has been exploring the use of computer-independent languages for describing its problems. This memorandum describes one of the latest of these languages, DETAB-X (DecisionTables, Experimental). In an effort to illustrate some of the features of DETAB-X it is compared with COBOL-61 (Common Business-Oriented Language), using examples of data and procedures written in both languages. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0288133

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HIGH FREQUENCY WORDS AND OCCURRENCE FORMS IN RUSSIAN PHYSICS

Personal Author(s):

KOZAK,A S

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The 1000 highest-frequency words and the 1000 highest-frequency occurrence forms of 265,417 running words of Russian are given. Each list is arranged in descending order of frequency of occurrences and percentage of text covered are shown with each entry. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0286792

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SELECTED LIST OF UNCLASSIFIED PUBLICATIONS OF THE SOCIAL SCIENCE DEPARTMENT-THE RAND CORPORATION

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0286793

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SIZES OF SIMULATION SAMPLES REQUIRED TO COMPUTE CERTAIN INVENTORY CHARACTERISTICS WITH STATED PRECISION AND CONFIDENCE

Personal Author(s):

GEISLER,MURRAY A

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The design and operation of simulation models for studying management policies and other problems that involve complex systems of random variables is presented. A major use of such models lies in measuring parameters which help to identify and select among preferred management policies. The estimation of these parameters is a statistical problem, and one of the significant statistical decisions is the size of sample to be drawn from the simulation model for making such estimates. Also studied are calculations of sample sizes, measured in number of simulated time periods, required to estimate certain parameters of selected inventory models with specified precision and confidence. In

particular, the inventory models used include the classical zero procurement lead-time case, plus selected nonzero procurement lead-time cases having 2-, 5-, and 10-period lead-times. The parameters estimated are the mean number of shortages and of overages per time period, an overage being the amount of stock on hand at the end of the period, with negative amounts (or shortages) equated to zero. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0290536

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME ASPECTS OF THE 'VALUE' OF LESS-DEVELOPED COUNTRIES TO THE UNITED STATES

Personal Author(s):

WOLF,CHARLES JR

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291087

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NEW EUROPE AND THE USA - SOME QUESTIONS

Personal Author(s):

MENDERSHAUSEN,HORST

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0286742

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/286742.pdf

Size: 715 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD286742>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Method of Least Squares and Optimal Filtering Theory

Descriptive Note:

Research memo.

Personal Author(s):

Ho, Y C

Report Date:

Oct 1962

Media Count:

33 Page(s)

Report Number(s):

RM-3329-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The correspondence between the well-known method of least squares and the more recent optimal filtering theory of Kalman is demonstrated. It shows that via a simple lemma on matrix inversion, most of the results in linear filtering and prediction theory can be easily derived. The connection of the least square method with the so-called Duality Principle in optimal control theory is also discussed. This connection places in evidence the mathematical similarities between problems of control and problems of prediction. The Memorandum concludes with a proposed application for orbit determination of a 24-hour satellite using the techniques described. This application is concerned with computing corrections to the satellite's orbital parameters based on noisy observations of azimuth and elevation angles by improving an initial orbital parameter estimation through additional observations. The orbital parameter corrections may then be used as the input to an orbit transfer process or to refine a preliminary orbit.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291089

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SATELLITE COVERAGE PROBABILITIES

Personal Author(s):

BOEHM,BARRY W

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0287527
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOME TACTICAL PROBLEMS IN SIMULATION METHOD
Personal Author(s):
CONWAY,R W
Report Date:
Oct 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0287114
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) UNIQUENESS PROBLEMS IN THE MATHEMATICS OF MULTIPLE SCATTERING
Personal Author(s):
MULLIKIN,T W
Report Date:
Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some recent mathematical studies concerning the uniqueness of solutions to Chandrasekhar's mathematical formulation of principles of invariance in the theory of radiative transfer are reported. It is shown that the X and Y equations and the $\psi(m)$ sub I and $\phi(m)$ sub I equations of Chandrasekhar have a multiplicity of solutions for many phase functions describing local scattering, the extent of this nonuniqueness having been only partially explored by Chandrasekhar. The desired solution to the X and Y equations is selected by imposing two additional linear constraints, which differ in the conservative case from those imposed by Chandrasekhar. An extension will later be made of these results to the $\psi(m)$ sub I and $\phi(m)$ sub I equations. A new formulation of all this theory is being worked out in terms of linear equations which are particularly well suited to numerical computation for thick atmospheres.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0287175

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMICS DEPARTMENT PUBLICATIONS, 1948-1962: AN AUTHOR INDEX OF THE OPEN LITERATURE, WITH ABSTRACTS

Personal Author(s):

PORCH,HARRIETT

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Number(s):

RM-2800-1

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An author index for RAND Economics Department publications available in the open literature is given. It extends in time from the Department's establishment in 1948 to the date of compilation-- September 30, 1962. It includes monographs (books and reports), less formal monographs or working papers (RAND Memoranda), and journal-type professional contributions (Papers). A comprehensive index of RAND open-literature publications can be found elsewhere in the RAND Index of Publications (August 2962). The present index has as its basic reference list complete bibliographical entries with abstracts, arranged under authors' names. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607649

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL SUPPORT FOR DEFENSE PLANNING,

Personal Author(s):

Fisher,G H

Report Date:

Oct 1962

Media Count:

7 Page(s)

Report Number(s):

P-2650

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The subject of 'analytical support for defense planning' is discussed. Since World War II, an important development in defense planning has been the generation and use of new techniques for the systematic examination of alternative proposals for future military systems and forces, which is called 'systems analysis.' The context of this analysis is usually such that the time horizon is not 'the present,' but rather some 5, 10, or even 15 years into the future. This means that the focus is not so much upon operational types of questions; instead it is upon development and procurement decisions.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422569

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ENVIRONMENT OF THE PLANETS,

Personal Author(s):

Kellogg, William W

Report Date:

Oct 1962

Media Count:

12 Page(s)

Report Number(s):

P2640

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0286794

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SIMULATION OF MULTI-COMPONENT DISTILLATION

Personal Author(s):

DELAND,E C

WOLF,M B

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A new method is proposed for the simulation of multi-component petroleum distillation columns. This method takes advantage of the power of mathematical programming techniques for computing the equilibrium states of physiochemical processes. The form I procedure was proposed and developed for other chemical systems, but it is perfectly general, being able to incorporate changes of phase, external sources or sinks of mass or energy, and differential equations which describe system dynamics if they are relatively slow with respect to the chemical dynamics. Using a theorem of the mathematician Gibbs, a chemical equilibrium may be defined in terms of the thermodynamic free-energy of each of the components. At equilibrium, the sum of the free energies will be minimized. A free energy (nonlinear) function is defined and then minimized under the natural physical (linear) restraints of the system. On the analog computer chosen because of the ease of representing the system dynamics and (nonlinear) columns by using an analog computer. AR) heat and mass balance equations-the solution method is by steepest descent. A digital solution has also been devised for columns by using an analog computer. .

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0625351

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC PROBLEMS OF ESTABLISHING A COMMUNICATIONS SATELLITE SYSTEM,

Personal Author(s):

JOHNSON,Leland L

Report Date:

Oct 1962

Media Count:

10 Page(s)

Report Number(s):

P-2647

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Four types of monopolistic ownership for a U. S. Satellite System are considered: (1) system owned and operated exclusively by U. S. international common carriers; (2) system owned and operated by these carriers and satellite equipment manufacturers; (3) system owned by neither of these but by a diversity of stockholders who generally have no direct business ties in the communications field, this firm selling voice channels to the common carriers; and (4) a system owned and operated by the government that would sell channels to common carriers. The U. S. is stated to have the problem of deciding whether (1) to develop a system for a large number of countries, particularly underdeveloped ones, this probably including a large number of satellite ground stations in many smaller nations or (2) to establish relatively few large ground stations around the world in major population centers in order to tie together the major land masses and then connect the underdeveloped countries into the worldwide system by conventional land line.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0290237

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/290237.pdf

Size: 545 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD290237>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NOTES ON NON-MILITARY MEASURES IN CONTROL OF INSURGENCY

Personal Author(s):

PAUKER, GUY J

Report Date:

Oct 1962

Media Count:

16 Page(s)

Report Number(s):

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A preliminary look is presented of non-military measures taken in countering insurgencies in the Philippines, Malaya and South Vietnam.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0287061

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SYNTHESIS OF CASCADE SWITCHING CIRCUITS

Personal Author(s):

LEVIEN,R E

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem is considered of synthesizing switching circuits that compute a given, completely specified switching function, and a new point of view is adopted in which switching circuits are considered to be realizations of algorithms rather than interpretations of truth-functional formulae. A restricted class of algorithms, called the cascade algorithms, is identified; it is suggested that tree and collapsed-tree, iterative, multiple-iterative sequential, and cascaded-sequential switching circuits may be viewed as realizations of cascade algorithms. All of these circuits are called, therefore, cascade circuits. Three basic techniques--functional decomposition, merging, and skipping--which permit the synthesis of efficient cascade algorithms to compute a given function, are described. It is then shown how these techniques may be applied so as to synthesize a collapsedtree, iterative, multiple-iterative, sequential, or cascaded-sequential switching circuit that computes a given switching function. Examples are drawn from the technology of current-steering devices, such as relays and cryotrons, but the method is applicable to other technologies. The procedures appear to be well adapted to execution on contemporary digital computers. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0287786

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON STABLE, PHYSICALLY REALIZABLE, LINEAR, TIME INVARIANT SYSTEMS

Personal Author(s):

WAX,NELSON

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0609755

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MODELS OF URBAN CHANGE: THEIR ROLE IN URBAN TRANSPORTATION RESEARCH,

Personal Author(s):

Zwick,Charles J

Report Date:

Oct 1962

Media Count:

18 Page(s)

Report Number(s):

P-2651

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A general discussion is presented of the role of urban change models in urban transportation research; and a description is given of work currently underway on urban transportation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0292652

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLICY ISSUES INVOLVED IN THE CONDUCT OF MILITARY DEVELOPMENT PROGRAMS

Personal Author(s):

KLEIN,BURTON H

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604818

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A QUICK LOOK AT SIMSCRIPT,

Personal Author(s):

Karr,Herbert W

Report Date:

Oct 1962

Media Count:

24 Page(s)

Report Number(s):

P-2658

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In SIMSCRIPT, the status of a simulated system is described in terms of entities, attributes of entities, and sets of entities. Status is changed at points in simulated time called events. A separate event routine must be written for each different kind of event to be included in the simulation. For convenience in

writing these routines, the SIMSCRIPT source language contains a variety of commands especially adapted to simulation problems. Some of these commands are illustrated.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293431

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COSTS AND BENEFITS OF RESPONSIVE SUPPORT OPERATIONS

Personal Author(s):

PETERSEN,J W

NELSON,H W

PAULSON,R M

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0294581

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DECREASING TRAVEL TIME FOR FREEWAY USERS

Personal Author(s):

HAASE, R H

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) T REE EC NICAL D VELOPMENT THA M Y INCREA E T E U ILITY OF FREEWAY : N EFFECTIVE
INTEGRATED CONTROL SY TEM TO REGULATE THE DENS ++S u y of traffic flow as a me ns o increase
utility of freeway .

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0633998

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/633998.pdf

Size: 471 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD633998>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MISSILE SAFETY -- THE UNSUNG EFFORT BEHIND THE SPACE PROGRAM

Personal Author(s):

Porch, Harriett E

Report Date:

Oct 1962

Media Count:

7 Page(s)

Report Number(s):

P-2630

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605774

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CREDO OF PUBLIC POLICY TOWARD THE DEPENDENCY PROBLEM IN CALIFORNIA,

Personal Author(s):

Bornet,Vaughn D

Report Date:

Oct 1962

Media Count:

8 Page(s)

Report Number(s):

P-2645

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In California there are many dependents who receive a sizable amount of money as a group. A considerable administrative machinery is required to handle the various programs of aid and service. These problems are discussed and analyzed in the report.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0726041

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Report on Activities to the NATO Advisory Panel on Operations Research,

Personal Author(s):

Stoller,Davis S

Report Date:

Oct 1962

Media Count:

41 Page(s)

Report Number(s):

P-2670

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper covers the activities of the author while under appointment as a Consultant in Operations Research by the NATO Advisory Panel on Operations Research, and as a Visiting Professor at the University of Rome, 1961-62. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0659130

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/659130.pdf

Size: 694 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD659130>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE ROLE OF OPERATIONS RESEARCH IN PLANNING FOR LIMITED WAR

Personal Author(s):

Weiner, M G

Report Date:

Oct 1962

Media Count:

17 Page(s)

Report Number(s):

RAND/P-2654

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The report begins with a discussion of limited war and some of the problem areas involved. This is followed by a subjective evaluation of where operations research has been somewhat successful in assisting the military planner. The article concludes with a speculation as to future capabilities and what some of the difficulties might be.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607650

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON MINOR CIRCLE TURNS,

Personal Author(s):

SHAVER,R D

Report Date:

07 Sep 1962

Media Count:

5 Page(s)

Report Number(s):

P-2632

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In a recent issue of the Journal of the Aerospace Sciences W. H. T. Loh introduced a definition of a minor circle turn. In the present paper, an alternative definition was suggested which appears useful in that it removes some of the restrictions found in the work by Loh. Loh's definition of a minor circle turn requires the vehicle to fly in a plane which is oriented normal to the axis of the earth and which is elevated above the equator at that distance where the plane intersects the surface of the earth at the desired latitude. While this is satisfactory for near-earth trajectories and for gentle minor circle turns, it does not appear to be capable of handling the cases where the altitudes are large and where the latitudes of the turn approach ninety degrees. To surmount this difficulty, the author defined a minor circle trajectory as that path where the vector pointing toward the center of the earth from the vehicle always cuts the surface of the earth at a constant latitude. This is equivalent to requiring the path of the vehicle to lie on the surface of a cone whose solid angle is the supplement of twice the latitude.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0610831

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NATION BUILDING AND REVOLUTIONARY WAR,

Personal Author(s):

Wilson,David A

Report Date:

Sep 1962

Media Count:

14 Page(s)

Report Number(s):

P-2624

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Social mobilization is discussed in terms of its significance in the building of nations. The success of revolutionary war in advancing the processes of social mobilization and subsequent nationhood is considered, particularly as it applies to the Communist advance in Asia.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0633999

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ENGINEERING MODEL ATMOSPHERE OF MARS,

Personal Author(s):

Schilling, Gerhard F

Report Date:

Sep 1962

Media Count:

18 Page(s)

Report Number(s):

P-2639

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The planning of the exploration of Mars by means of space vehicles imposes demands on our knowledge of the atmosphere of Mars which go beyond the concepts of 'best values' or 'most likely conditions.' In view of the present scarcity of reliable data, a theoretical model of the Martian atmosphere is offered here which instead gives the limiting conditions to be encountered. This model atmosphere gives extreme upper and lower probable limits of pressure, temperature, and density up to 150 km altitude over middle and low latitudes, independent of time of day or season. In addition, a number of parameters are tabulated which are of concern for the engineering design of entry probes. The mathematical method was based on the present factual knowledge with a minimum of assumptions and has therefore yielded results on a rather high confidence level. This has been achieved in part through an extremely wide spread of values. Nevertheless, a combination of circumstances makes it apparent that the engineering task of atmospheric entry will be easier for the Martian atmosphere than for the atmosphere of any other planet in our solar system. It can safely be concluded that Mars will be the first planet inviting manned exploration from an engineering as well as scientific point of view.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604534

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TALMUDISM AND COMMUNIST COMMUNICATIONS,

Personal Author(s):

ZAGORIA,Donald S

Report Date:

Sep 1962

Media Count:

37 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion of methodology for analyzing Communist communications is presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604516

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MODEL OF HOUSEHOLD LOCATION AND TRIPMAKING BEHAVIOR WITH REFERENCE TO DETROIT,

Personal Author(s):

KAIN,John F

Report Date:

Sep 1962

Media Count:

41 Page(s)

Report Number(s):

P-2627

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper deals with the residential and tripmaking behavior of Detroit workers. Residential behavior here refers to the consumption of an interrelated bundle of housing and transportation goods and services. Tripmaking, in this context, is limited to the weekday journey to and from work. The statistical analysis presented here is designed to explore the interrelationships in consumption between housing and transportation. It is hoped the analysis will provide useful information regarding the decisions to locate households in certain areas, and will indicate what implications this information may have for urban transportation and land-use planning.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0283515

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FORCES BETWEEN CONDUCTING SPHERES IN A UNIFORM ELECTRIC FIELD

Personal Author(s):

DAVIS,M H

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The electrostatic boundary value problem of two conducting spheres in a uniform electric field is solved in bispherical coordinates. The spheres may have any relative size, they may be charged or uncharged, and the field may make any angle with their line of centers. The components of the force acting on one of the spheres along and perpendicular to the line of centers are derived and numerical results are presented. One important application of these results is in the field of cloud physics, since electrostatic effects can markedly influence the coalescence of cloud droplets. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0284429

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ACCELERATION CONTOURS AROUND THE EARTH-MOON LIBRATION POINTS,

Personal Author(s):

SCHECHTER,H B

MCGANN,J V

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0284630

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/284630.pdf

Size: 638 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD284630>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME IMPLICATIONS OF THE EARTH'S GRAVITATIONAL FIELD FOR THE INTERNAL STRUCTURE OF THE EARTH

Personal Author(s):

OBERSTE-LEHN, D

Report Date:

Sep 1962

Media Count:

25 Page(s)

Report Number(s):

RM-3247-PR

XC-USAF

Contract Number:

AF 19(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution unlimited

Abstract:

(U) The configuration of the earth's potential field was determined from the orbits of near-earth satellites. This potential can be represented by a series expansion in spherical harmonics. The values of certain coefficients (J_n) for terms in this series have been calculated. The J_2 coefficient reflects the oblateness of the earth; the cause of the J_3 coefficient was not established. The potential field can be expressed by surface gravity anomalies resulting from inhomogeneities in mass distribution within a body. Such differences in mass distribution exist between oceanic and continental areas within the crust and upper mantle over large areas of the earth's surface. Results are presented of an investigation of the gravitational fields of earth models performed to determine the nature of gravity anomalies to be expected from oceanic and continental areas. Using conventional crustal structure, the earth-model results indicate that a surface anomaly exists which is positive over continental blocks, and that its magnitude increases with increase in the assumed depth to isostatic compensation and with increase in positive topographic relief. Application of the earth-model anomaly to the actual distribution of continents and oceans results in a calculated value for the gravitational anomaly which is of the same order of magnitude as, but of opposite sign to, that derived from satellite orbits. Conditions that might reconcile this discrepancy are presented. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0284680

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FORTAB: A DECISION TABLE LANGUAGE FOR SCIENTIFIC COMPUTING APPLICATIONS

Personal Author(s):

ARMERDING, G W

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) FORTAB is a decision table language based on the FORTRAN scientific computing language. Programs written in the combined FORTAB and FORTRAN languages can be compiled by a FORTAB pre-processor program which was constructed for the IBM 7090 computer. Initial experiments conducted using the FORTAB language indicate that a decision table language added to a scientific computing language results in a powerful combination of programming tools. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0283798

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIMULATION AND THE LOGISTICS SYSTEMS LABORATORY

Personal Author(s):

GEISLER,M A

HAYTHORN,W W

STEGER,W A

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) DESCRIPTORS: *Continued fractions, *EQUATION *Perturbation theory Green's function, Differential equations. A problem of continuing interest is that of obtaining approximate solutions of the functional equation $L(u) + (a(p) + \lambda b(p))u = 0$, where L is a linear transformation, in terms of the solution of the unperturbed equation $L(u) + a(p)u = 0$. USING THE Green's function, or equivalent techniques, regarding

the term involving lambda as a forcing term, we can convert the first equation to the form $u = f + \lambda T(u)$, where T is a linear transformation. We present a new approach to problems of this nature using the classical technique of continued fractions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0285647

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RAND-SHARE OPERATING SYSTEM MANUAL FOR THE IBM 7090 COMPUTER

Personal Author(s):

BRYAN,G E

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0286756

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IMPROVED ASYMPTOTIC PROPERTIES OF ERROR CORRECTING CODES

Personal Author(s):

JOHNSON, SELMER M

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A new upper bound on nonsystematic binary errorcorrecting codes, using a sphere-packing approach and combinatorial analysis is discussed. A significant refinement is now added; together with a detailed study of the asymptotic behavior of the upper bound, this enables one to show that any large code must correct almost all sequences with a larger number of errors than the code was designed for. This excess is expressed numerically as a fraction of the designed error-correcting capability of the code. The fraction is a function of the ratio of the sequence length and the designed error-correcting capability. A possible application might be in the use of a larger code giving almost certain error correction rather than a smaller one with certain correction capability. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0285650

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LEARNING, GENERALITY AND PROBLEM SOLVING

Personal Author(s):

NEWELL, ALLEN

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0285975

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A METHOD OF COMPUTING THE DISTRIBUTION FUNCTION OF RADIOACTIVE DOSES FROM MULTIPLE
NUCLEAR DETONATIONS

Personal Author(s):

BATTEN,E S

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0286021

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET CLASSIFICATION SCHEME FOR LITERATURE

Personal Author(s):

KRIEGER,F J

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0285070

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CAUCHY-SCHWARTZ INEQUALITY FOR AN OPERATOR-VALUED INNER PRODUCT

Personal Author(s):

KITCHEN,J W JR

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) IN MANY BRANCHES OF FUNCTIONAL ANALYSIS THERE IS A CRUCIAL SET OF INEQUALITIES WHICH MUST BE ESTABLISHED BEFORE MUCH ELSE IS POSSIBLE. The Cauchy-Schwartz inequality plays such a role in the theory of Hilbert spaces. A far-reaching generalization of this basic inequality is presented. This presentation is the outgrowth of a study of the Fourier expansion theory for almost periodic functions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604455

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON THE USE OF WICK'S THEOREM,

Personal Author(s):

RAMAKRISHNAN,A

Venkatesan,K

Devanathan,V

Report Date:

Sep 1962

Media Count:

11 Page(s)

Report Number(s):

P-2633

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A comparative study is made of the well-known method of establishing the equivalence of the field theoretic and Feynman formalisms using Wick's theorem and the method of Ramakrishnan, et. al.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604453

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RAND'S GRADUATE STUDENT PROGRAM AS A MEANS OF SELECTING COST ANALYSTS,

Personal Author(s):

Noah,J W

Report Date:

Sep 1962

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The RAND Graduate Student Program offers a partial solution to the problems associated with hiring new and untrained personnel. The graduate student selected for the program is usually one of the top Ph.D. candidates at his respective school. He is treated much the same as new men joining our staff on a full-time basis. He works on a problem of individual research based on his area of interest and specialty and on RAND's interest, and which hopefully can be completed during the summer period. The idea behind the program is to interest qualified graduate students in full-time employment after graduation, and to allow RAND to observe the capabilities of the candidate firsthand prior to offering him permanent employment. I think it not premature to say that RAND's Graduate Student Program has already proven to be worthwhile, and especially worthwhile to the Cost Analysis Department. The projects worked on this summer by our summer students represent a direct contribution to our research program. The amount of supervisory time given to these students has not been a problem; on the contrary, it has been enlightening. Success of such a program depends in large part upon management's willingness to view it as a long-range capital investment with a continuing commitment.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0283797

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DECAY OF IONIZATION IMPULSES IN THE D AND E REGIONS OF THE IONOSPHERE

Personal Author(s):

CRAIN,C M

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0286795

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TECHNICAL AND POLITICAL ASPECTS OF ARMS CONTROL NEGOTIATION: THE 1958 EXPERTS' CONFERENCE

Personal Author(s):

ZOPPO, CIRO ELLIOTT

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The method by which the final report of the Experts' Conference was achieved -- the delegation of circumscribed problems to select committees -- supports the idea that a deliberately negotiatory approach would be useful in technical as it obviously is in political talks. Postwar technical conferences on arms control between the Communist and Western powers were not purely scientific meetings. The comparison of data did not always lead to similar conclusions by the scientists of the two sides. The presentation of available facts in a technical forum led to conclusions influenced by political imperatives. Since decisions taken in political negotiations must be based on policy considerations much broader than purely scientific ones, it might help to integrate the technical and political aspects, and to consider the quest for formal arms control agreements as an essentially political or negotiatory activity. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605633

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AIRCRAFT NAVIGATION BY SATELLITE,

Personal Author(s):

Myers,H A

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Number(s):

P-2623

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Aircraft navigation using doppler and orbital information transmitted from a satellite is shown to be feasible, at least in a limited sense. The least squares, differential correction method of computation is used. If sufficiently accurate velocity information can be provided, this approach could yield positions for long-range aircraft that are an order of magnitude more accurate than have been achieved with other world-wide, all-weather, all-altitude systems, such as doppler and inertial navigators. The least squares, differential corrections solutions for both position and velocity do not converge for reasonable initial errors. Therefore, accurate aircraft velocity components, such as those provided by a doppler navigator, must be known. For one knot velocity errors the position of a 500-knot aircraft can be determined to one-half nautical mile or better for latitudes up to 70 degrees. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0283799

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NEW FORMALISM IN PERTURBATION THEORY USING CONTINUED FRACTIONS

Personal Author(s):

BELLMAN,RICHARD

RICHARDSON,JOHN M

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0290203

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLAR SYSTEM SCIENCE: 1961 LITERATURE SURVEY, PART IV

Personal Author(s):

WILSON,DONNA

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This bibliography was selected from the abstracts published in the ASTIA Technical Abstract Bulletins: U61-1-1, 1 January 1961 through U62-3-5, 1 September 1962 and the U. S. Government Research Reports, Vol. 35, No. 2, 10 February 1961 through Vol. 37, No. 17, 5 September 1962. The ratio of the number of entries selected to the number of abstracts surveyed is approximately 1/50. The large number of reports surveyed naturally prevented reviewing each individual report and therefore the information indicating the treatment of the subject matter (i.e., observation, interpretation, theory, etc.) is not included in this section. Almost all the reports in this bibliography bear, in addition to an ASTIA number, an OTS price and are available to any requestor from the Office of Technical Services, U.S. Department of Commerce, Washington 25, D. C. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604817

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REVIEW OF 'PROCEEDINGS OF THE INTERNATIONAL METEOROLOGICAL SATELLITE WORKSHOP, NOVEMBER 13-22, 1961' U. S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D. C., 1962,

Personal Author(s):

Kellogg, W W

Report Date:

Sep 1962

Media Count:

6 Page(s)

Report Number(s):

P-2635

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The talks, and much of the discussion following the talks, are all included in the Proceedings, along with an Appendix giving further details on how the TIROS system operates. The Proceedings serves as an

excellent source book of information on U. S. weather satellites and their use, and a brief description of what the future holds if all goes according to plan.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0289850

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INDUCTIVE ACCOUNTING

Personal Author(s):

BROWN,R GENE

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607391

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON DISTRIBUTED COMMUNICATIONS NETWORKS,

Personal Author(s):

Baran,Paul

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Number(s):

P-2626

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The survival of digital communication networks using links of less than perfect reliability in event of a physical attack is discussed. The use of redundant links between distributed communication centers is used to achieve distributed networks, interconnecting more centers with one another. The plan is analogous to present telephone plant switching networks.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0663386

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INDEPENDENCE OR SUBORDINATION. THE JAPANESE COMMUNIST PARTY BETWEEN MOSCOW AND PEKING,

Personal Author(s):

Langer,Paul F

Report Date:

Sep 1962

Media Count:

57 Page(s)

Report Number(s):

P-2628

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

20 - JOURNAL ARTICLES; DTIC USERS ONLY

Distribution Statement:

Availability: Published in copyrighted journal.

Abstract:

(U) Contents: The character of Japanese Communism; Communist opportunities and dilemmas; Strategy and tactics; The Japanese Communist Party and the Communist world; The future: independence or subordination.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0287499

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Flaws in Networks,

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Contents: Static maximal flow Feasibility theorems and combinatorial applications Minimal cost flow problems Multi-terminal maximal flows

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0609754

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYSIS OF SOME LAND TRANSPORTATION VEHICLES, TODAY AND TOMORROW,

Personal Author(s):

HAASE,R H

Report Date:

Aug 1962

Media Count:

28 Page(s)

Report Number(s):

P-2625

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some of the results of the study are presented as they pertain to the passenger automobile, the transit bus, and the rail rapid-transit car.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0283392

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE APPLICATION OF QUEUING THEORY TO THE SPAN OF CONTROL

Personal Author(s):

HILL,L S

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The supervisor- worker relationship is considered to be a waiting-line situation where the supervisor is the service unit. Generation of the waiting line is a stochastic process. If there is too much demand on the supervisor, there is an excess of worker waiting time. With too little demand, there is too much idle service time. Too many subordinates may mean loss of ADEQUATE CONTROL. Too many supervisors may be a costly extravagance and may also create too many organizational levels thereby increasing the difficulties of communication. The idea is to seek a trade-off between worker waiting time and supervisory costs. A cost model is presented which can be used to estimate the span of control for varying service times and cost inputs. Factors influencing the service time are taken into account. The model is predicated on finite queuing theory. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0402286

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/402286.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD402286>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE MILITARY ROLE IN SPACE -- A SUMMARY OF OFFICIAL, PUBLIC JUSTIFICATIONS

Personal Author(s):

Puckett, Robert H

Report Date:

Aug 1962

Media Count:

30 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604577

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CHANGES IN THE LOCATION OF FOOD AND GENERAL MERCHANDISE STORE EMPLOYMENT WITHIN METROPOLITAN AREAS, 1948-1958,

Personal Author(s):

Niedercorn,John H

Kain,John F

Report Date:

Aug 1962

Media Count:

26 Page(s)

Report Number(s):

P-2614

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper presents an econometric model explaining changes in food and department store employment during the two post-war periods, 1948-1954 and 1954-1958. On the whole, the empirical results presented conform to the a priori model of retail employment location derived earlier. Seven of eight regression equations successfully explain a considerable proportion of the total variation in the dependent variable. Perhaps the most significant finding of the study is the importance of the weighted

change in labor-sales ratio variable for the central city equations. This illustrates the importance of technological change, innovation, and other shifts in the production function in determining levels of employment. However, the ring equations show that changes in productivity are not independent of changes in employment and new investment. In rapidly growing areas, changes in employment and new investment appear to influence productivity more than autonomous changes in the latter influence the former. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0282106

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) QUALITY CONTROL AND RELIABILITY FOR A TOTAL WEAPON SYSTEM,

Personal Author(s):

Bean ,Eloise E

Steger,Wilbur A

Report Date:

Aug 1962

Media Count:

23 Page(s)

Report Number(s):

RM-3130-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A possible approach is suggested for applying techniques to the established fields of reliability analysis and quality control. These techniques, including manned and all-computer simulation and tradeoff analysis between reliability, quality control, support, and the weapon end item, have not been explicitly considered and used by decision-makers responsible for reliability and quality control. Weapon system quality control actions are actions taken during the weapon planning and development cycle to

help ensure to the commander a high degree of confidence in his over-all system. Some specific examples of how military or industrial decision-makers might be able to gain useful systems-oriented insight into quality control and reliability problems are presented. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604809

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SPACE LOGISTICS: TECHNOLOGY VERSUS MANAGEMENT,

Personal Author(s):

Bell, Chauncey F

Report Date:

Aug 1962

Media Count:

10 Page(s)

Report Number(s):

P-2613

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper postulates that there are few new factors or elements in space logistics. Rather, the space environment places increased importance on improved management of these support elements, calling in some cases for use of automatic fault-isolation, test, checkout, and data-reduction techniques.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0340001

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/340001.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD340001>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE VIETNAMESE 'STRATEGIC HAMLETS': A PRELIMINARY REPORT

Personal Author(s):

Donnell, John C

Hickey, Gerald C

Report Date:

Aug 1962

Media Count:

44 Page(s)

Report Number(s):

RM-3208-ARPA

XD-ARPA

Contract Number:

SD-79

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605965

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) USE OF COMPUTERS IN THE PROCESSING AND ANALYSIS OF GEOGRAPHIC INFORMATION,

Personal Author(s):

Kao,Richard C

Report Date:

Aug 1962

Media Count:

9 Page(s)

Report Number(s):

P-2593

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The impact of high-speed computers on the collection and use of data in geographic research is assessed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0283796

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FACTORS IN SELECTING AND TRAINING PROGRAMMERS

Personal Author(s):

SWEETLAND,ANDERS

Report Date:

Aug 1962

Media Count:

18 Page(s)

Report Number(s):

RM-3245-PR

Contract Number:

AF49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some of the factors related to the selection and training of computer programmers are determined. The evaluation of nine classes of programmer trainees according to their intelligence, motivation, and classroom performance is described. Supervisors' ratings were also obtained as a follow-up study. Both intelligence and motivation, particularly motivation, are good predictors of classroom performance. Intelligence is also a predictor of supervisors' ratings, but not as good a one as classroom showing. Noncognitive measures were explored, which showed that programmers have interests that clearly distinguish them from the lay population. As a result, a scoring key for the Kuder Vocational Preference Record was developed. This key should not be considered a final product, however, but rather as an illustration that such a key is feasible. The potential fruitfulness of research in programmer characteristics, interests, and aptitudes is discussed; it suggests four areas for such research: (1) the organismic factors, with emphasis on characteristics other than intelligence, (2) programmer supervisors, (3) training, and (4) the working milieu. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604797

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A THEORY OF PURSUIT AND EVASION,

Personal Author(s):

Ryll-Nardzewski,C

Report Date:

Aug 1962

Media Count:

22 Page(s)

Report Number(s):

P-2606

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper was to present an approach to the theory of pursuit and evasion with perfect information based only on general topological and set theoretical notions. The author's definition of the strategy is rather strange because multivalued strategies are allowed, such a strategy prescribes to a given motion of the enemy a whole class of possible motions. The schema adopted in this paper is general enough to enclose the pursuit and evasion with some restrictions on velocities or accelerations (which may depend on the positions and directions of motions--for this reason any metric distance functions are introduced. The payoff function is the amount of time used by the pursuer and the evader to reach a configuration from a given set of final configurations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0281850

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN RUSSIAN MORPHOLOGY. I. THE SUFFIX-AGA,

Personal Author(s):

Worth,Dean S

Report Date:

Aug 1962

Media Count:

38 Page(s)

Report Number(s):

RM-3235-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The formal and semantic structure of Russian nouns derived from nouns, adjectives and verbs by means of the suffix -aga is analyzed. The formal devices of derivation include not only addition of the

suffix itself, but specific procedures for selection of a derivational stem, and specific consonantal and vocalic alternations occasioned by the suffix. The semantic differential between base form and derivative in -aga is described in terms of differences of referential meaning and of evaluative and distributional markings. The parallelism of formal and nonformal procedures is pointed out, as is the interaction of derived and non-derived -aga forms.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606334

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COST FINDING THROUGH MULTIPLE CORRELATION ANALYSIS,

Personal Author(s):

McClenon,Paul R

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Number(s):

P-2619

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Multiple correlation analysis will not seriously compete with established costing practices, but under some circumstances will prove useful for developing cost estimates not determinable by other means. This paper presents a simple example in order to give accountants a glimpse of the technique and to enable them to recognize potential applications. Consultation with a statistician or a good textbook is urged.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607392

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON SOME EXPLICIT SOLUTIONS FOR CONSTANT-TEMPERATURE MAGNETO-GASDYNAMIC CHANNEL FLOW.

Personal Author(s):

Romig,Mary F

Report Date:

Aug 1962

Media Count:

4 Page(s)

Report Number(s):

P-2637

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604530

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME PERCENTAGE POINTS OF THE NON-CENTRAL T-DISTRIBUTION,

Personal Author(s):

Scheuer,Ernest M

Spurgeon,Robert A

Report Date:

Aug 1962

Media Count:

14 Page(s)

Report Number(s):

P-2621

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Percentage points x such that $P(t/\text{square root of } f \leq x) = \epsilon$ where t has the non-central t -distribution with f degrees of freedom and non-centrality parameter square root of $(f + 1) K_{\text{sub } p}$ ($K_{\text{sub } p}$ is the standard normal deviate exceeded with probability p) are tabulated for $\epsilon = .975, .025$; $p = .2500, .1500, .1000, .0650, .0400, .0250, .0100, .0040, .0025, .0010$; $f = 2 (1) 24 (5) 49$. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0282683

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MATERIAL REQUIREMENTS FOR BOUNDARY-LAYER STABILIZING COATINGS-WATER APPLICATION

Personal Author(s):

KRAMER, M O

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) INVESTIGATION CONTINUED OF ONE FACET OF A POTENTIALLY IMPORTANT TECHNOLOGICAL ADVANCE IN MINIMIZING SKIN-FRICTION DRAG OF BOTH AIRCRAFT AND HYDROCRRAFT. The method investigated consists in favorably modifying the natural boundarylayer flow by means of distributed

damping, as opposed to the more widely investigated distributed-suction method. Several features of the distributed-damping method of laminar-flow control are of particular interest for potential vehicular applications: no pumps, associated power sources, or ducts are required within the vehicle; and the stabilizing surface coating applied to the vehicle has a smooth, impermeable surface that is not subject to clogging. The structural material of stabilizing coatings requires primarily a low modulus of elasticity combined with great resiliency, or low inherent damping. Natural rubber is unsatisfactory, since its resiliency is poor at low moduli of elasticity. It is concluded that improved hydraulic performance of the known coating designs can be achieved by using a material with appreciably less inherent damping than rubber, but equal modulus of elasticity. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0282491

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SYNERGETIC PLANE CHANGE FOR ORBITING SPACECRAFT

Personal Author(s):

NYLAND,F S

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604531

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) 99-GATE,

Personal Author(s):

Van Wormer, Theodore A

Report Date:

Aug 1962

Media Count:

49 Page(s)

Report Number(s):

P-2602

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is a primer for instruction in the 99-GATE language. 99-GATE is a system in which you may instruct a computer to perform algebraic computations. Specifically, 99-GATE is: General Algebraic Translator Extended for the IBM 709/7090.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0282609

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE RESPONSE TIME OF THE LOWER IONOSPHERE TO A PULSE OF IONIZATION

Personal Author(s):

LELEVIER, R E

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0282602
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) DETAB-X: AN IMPROVED BUSINESS-ORIENTED COMPUTER LANGUAGE
Personal Author(s):
POLLACK,SOLOMON L
Report Date:
Aug 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604819
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) CONTEMPORARY CHINA AS A PROBLEM FOR POLITICAL SCIENCE,
Personal Author(s):
Halpern,A M

Report Date:

Aug 1962

Media Count:

32 Page(s)

Report Number(s):

P-2617

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A range of problems are set forth, referring to the political development of Communist China, whose investigation attempts to advance our understanding of contemporary Chinese politics and produce results of value for the general study of politics. The focus is particularly, but not exclusively, on events since the establishment of the People's Republic of China in 1949.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605773

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PROPOSAL FOR THE INDIRECT RETRIEVAL OF UNPUBLISHED TECHNICAL MATERIAL,

Personal Author(s):

Patrick,R L

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Number(s):

P-2616

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Armed Service Technical Information Agency provides an information retrieval service to Department of Defense contractors with a demonstrated need to know. This Paper proposes a subsequent search of the Field of Interest Register if a regular ASTIA bibliographic search fails to produce a stipulated minimum number of items. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278583

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE BOUNDARY VALUE PROBLEM ON AN INFINITE INTERVAL. EXISTENCE, UNIQUENESS AND ASYMPTOTIC BEHAVIOR OF BOUNDED SOLUTIONS TO A CLASS OF NONLINEAR SECOND ORDER DIFFERENTIAL EQUATIONS

Personal Author(s):

GROSS,O A

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A class of second-order nonlinear differential equations is studied. It is shown that, for a given member of the class and a given initial value, there exists a unique continuous bounded function on the nonnegative reals which satisfies the equation and the boundary value, and moreover that this function tends to a nonpositive constant as the argument tends to infinity. An application is given to the asymptotic behavior of the bounded solution to the equation governing the motion of a particle in an ionized field under the influence of the Ukawa potential. Since topological methods seem inapplicable in the determination of isolated elements of noncompact spaces, a lattice theory is used. The key tool is a fixed-point theorem. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0282337

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXTERIOR CALCULUS ON MODULES

Personal Author(s):

OSBORN, HOWARD

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An exterior calculus is defined on an arbitrary module over a commutative ring with unit, which reduces to the classical exterior calculus with polynomial coefficients in case the module is a real finite-dimensional vector space. Analogs of the Poincare lemma and the existence theorem for conservation laws are proved, the latter by means of an explicit representation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605739

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON STOCHASTIC APPROXIMATION METHOD AND OPTIMAL FILTERING THEORY,

Personal Author(s):

Ho,Yu Chi

Report Date:

Aug 1962

Media Count:

6 Page(s)

Report Number(s):

P-2622

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper establishes some connections among the maximum likelihood estimate, the optimal filtering and the stochastic approximation solutions to the following well-known problem: Consider the vector-matrix equations $Ax + v_{\text{sub } k} = b_{\text{sub } k} \quad k = 1, 2, \dots$ where A is a given $r \times n$ matrix; x is an unknown n -vector; $v_{\text{sub } k}$ is a random r -vector with $E(v_{\text{sub } k}) = 0$ and $E(v_{\text{sub } k} v_{\text{sub } j}) = I \delta(k - j)$ $b_{\text{sub } k}$ is a r -vector of observation. It is desired to determine an estimate \hat{x} for the unknown parameters x which is optimal in some sense.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0282983

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TWO RESULTS ON TRANSIENT MARKOV CHAINS

Personal Author(s):

VEECH,WILLIAM

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A necessary condition is given for solution of the equation of stationarity for transient Markov chains.

A statement is included about the limiting behavior of transient chains. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606657

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTER TRAINING AND EDUCATION: THE PICTURE IN 1962,

Personal Author(s):

Gruenberger, F J

Report Date:

Jul 1962

Media Count:

12 Page(s)

Report Number(s):

PPP-2597

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606659

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HOW CITIES SHOULD APPROACH DATA PROCESSING,

Personal Author(s):

Mason, Raymond J

Report Date:

Jul 1962

Media Count:

10 Page(s)

Report Number(s):

P-2610

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Although certain benefits can be achieved through clerical mechanization alone, the most important benefits to cities will come through the application of the new data processing equipment to entirely new ways of handling information. In order to achieve these benefits, cities must understand both the nature of data systems and the equipment available for improving them. All data systems consist of five basic activities--whether they are automatic, semi-automatic, or merely manual systems. These activities are input, storage, processing, output, and communications. The ideal system toward which cities should work is one in which environmental type data gathered by all departments is filed in unified, central records describing persons or parcels of real property. These central files would replace many existing files--not be created in addition to them--since they would be available to all departments for functional use in their normal operations. Eventually, these central files should be based on even larger areas, covering more than one city--such as county, metropolitan area, or an entire state.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606658

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPRAISAL OF ERROR PERFORMAAANCE I ECE IN DATA TRANSMISSION,

Personal Author(s):

Mertz,Pieeerre

Report Date:

Jul 1962

Media Count:

47 Page(s)

Report Number(s):

P-2587

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Evaluation of the error performance of data transmission systems faces problems because the error incidence does not follow conventional statistical laws for random occurrence. It has been found to follow hyperbolic statistical laws reasonably well, and these can be used as a guide to measurement procedures. A brief review is given of the Poisson and hyperbolic laws and their comparison with experience from rather varied sources. Some analysis is presented of the error incidence and grouping which occur during periods of poor operation, and the influence which these distributions have on the organization of measurement plans for the obtainining of significant results. Possible alternatives are suggested for characterizing error performance to the long-time average error rate commonly used.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604816

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CHINA, THAILAND AND THE SPIRIT OF BANDUNG,

Personal Author(s):

Wilson,David A

Report Date:

Jul 1962

Media Count:

100 Page(s)

Report Number(s):

P-2607

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The political relations between the People's Republic of China and Thailand are discussed. The political history, foreign policy, and social and ethnic problems of the two nations are examined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604799

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME MONTE CARLO ESTIMATES OF THE YULE DISTRIBUTION,

Personal Author(s):

Simon,H A

VanWormer,T A

Report Date:

Jul 1962

Media Count:

30 Page(s)

Report Number(s):

P-2599

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents some Monte Carlo simulations of the Yule process, viewed as a stochastic process for generating the frequency distributions of words in text. In the first part, data are presented

for the case, which cannot be solved analytically in closed form, where the rate at which new words enter the text is variable. In the second part, Monte Carlo simulations are compared with two sets of data where both the empirical frequency distributions and the actual rate at which words enter the text are known. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0400665

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/400665.pdf

Size: 176 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD400665>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON GEOMAGNETIC FLUCTUATIONS IN REGIONS REMOTE FROM HIGH-ALTITUDE NUCLEAR BURSTS

Personal Author(s):

Field, Edward C

Report Date:

Jul 1962

Media Count:

7 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606017

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ROBOT WRITING,

Personal Author(s):

Scott,Douglas H

Report Date:

Jul 1962

Media Count:

8 Page(s)

Report Number(s):

P-2589

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Technical writers who are hypnotized by the mechanical metaphor inevitably produce robot writing - a separate language, distantly related to the prose of Darwin, Huxley, Jeans, and Einstein. Where they were clear, fresh, and graceful, the robot writer is hard, dull, and clumsy. Where they were merely human, the robot writer is infallible, prefabricated, impersonal, and irresponsible. These four characteristics are interlinked. An example of one usually illustrates the other three.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604815

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604815.pdf

Size: 998 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604815>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE PREPARATION OF CAMPHOR MODELS FOR WINDTUNNEL SUBLIMATION STUDIES; PRELIMINARY RESULTS ON THE SUBLIMATION OF A POINTED CONE

Personal Author(s):

Charwat, Andrew F

Report Date:

Jul 1962

Media Count:

28 Page(s)

Report Number(s):

RAND-P-2611

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A preliminary study of techniques for the preparation of camphor and naphthalene models for experimental research on sublimation cooling in hypersonic flow led to the development of a vacuum sintering technique which yields uniform, homogeneous, clear and easily machinable samples. It is felt, on the basis of static and wind tunnel tests, as well as on the basis of these general observations, that models prepared in this fashion are well suited for accurate reproducible measurements of the history of subliming surfaces and that they will provide reliable data. A method for accurate measurement of surface temperatures during the course of the destructive phase change mass transfer process is proposed and partly developed. If it proves to be totally successful, relatively complete and valuable information on the complex flow field will be obtainable with relatively simple facilities and techniques.

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0414817

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE WEAPON PLANNING PROBLEM FOR GENERAL PURPOSE FORCES: A FUNCTIONAL APPROACH,

Personal Author(s):

Linstone,Harold A

Report Date:

Jul 1962

Media Count:

134 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum suggests a technique to relate equipment to operational needs so that the enumeration of hardware alternatives for general purpose forces is facilitated. There are two basic steps in this functional approach: (1) Enumeration of missions and definition of systems to perform each mission at any desired time point. (2) Development of a set of hypothetical contingency plans representative of the wide variation of operational conditions faced by general purpose forces. The use of flow charts for (1) and equipment lists for (2) is discussed for United States forces. The essence of the approach is the fusing of (1) and (2) to permit the display of system alternatives. Applications to hypothetical decision problems are discussed to illustrate the possibilities and limitations of the technique. Flow charts are also developed for S. Viet Nam forces to indicate its potential value in the consideration of alternatives in the Military Assistance Program. Finally the next logical step in the determination of feasibility of the approach is described. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603722

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VARIATIONAL PROBLEMS WITH STATE VARIABLE INEQUALITY CONSTRAINTS,

Personal Author(s):

Dreyfus,Stuart

Report Date:

Jul 1962

Media Count:

99 Page(s)

Report Number(s):

P-2605

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Contents: The problem of Lagrange The problem of Mayer Decision variable inequality constraints
State variable inequality constraints Numerical solution: Successive approximation to the problem
Successive approximation to the solution The numerical solution of an unconstrained problem The
bounded brachistochrone problem The Hamilton-Jachobi equation Terminal conditions for multipliers.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278489

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCATTERING AND POLARIZATION PROPERTIES OF POLYDISPERSED SUSPENSIONS WITH PARTIAL
ABSORPTION

Personal Author(s):

DEIRMENDJIAN,D

Report Date:

Jul 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The angular scattering and polarization properties of polydispersed suspensions of nonabsorbing and partially absorbing spheres have been computed using the complete Mie series. The results with three types of size distributions are presented and compared with observations. These show a strong dependence of angular intensity and polarization patterns on the size distribution, the size range, and the dielectric and ABSORBING PROPERTIES OF THE INDIVIDUAL PARTICLES. A peculiarity of scattering at angles near 45 degrees, observed experimentally and independently by two authors, is corroborated by the numerical results. Prominent observational features characteristic of natural fog, such as an extremely bright aureole, rainbows and counter coronas are reproduced in a model corresponding to a cloud of spherical water droplets, with a wide distribution in droplet radius and a maximum concentration at a 4-micron radius. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0289429

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE INVERSION OF A CONVOLUTION TRANSFORM WHOSE KERNEL IS A LAGUERRE POLYNOMIAL

Personal Author(s):

WIDDER,D V

Report Date:

Jul 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278262

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON CONTROL PROBLEMS WITH BOUNDED STATE VARIABLES

Personal Author(s):

BERKOVITZ,L D

Report Date:

Jul 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Identifiers: Problem solving. Control problems are studied in which constraints that are independent of the control are imposed on the state variables. Necessary conditions that hold along an optimal trajectory are derived in a relatively simple fashion from known results in the calculus of variations. These results had been obtained by Gambrelidze in a different fashion. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278475

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SPACE GEOMAGNETISM, RADIATION BELTS, AND AURORAL ZONES

Personal Author(s):

VESTINE,E H

Report Date:

Jul 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The nature of the geomagnetic field and a few variation from ground level out to about 10 earth radii is discussed. Regions of trapped radiation are noted. The unshielded dosages during a great solar event on a few days per decade exceed limits of human safety. Modest shielding of somewhat less than 1 gm/sq cm will not remove the hazards. The chance is probably only one in several thousand that this will not suffice to preserve life on any given day. Transient accelerations of trapped particles result in atmospheric effects such as the aurora, and the polar electrojets, but the cause of these acc I rative actions is quite obscure. (uthor)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0617264

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/617264.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD617264>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SINO-SOVIET CONFLICT AND THE WEST

Personal Author(s):

Zagoria, Donald S

Report Date:

Jul 1962

Media Count:

31 Page(s)

Report Number(s):

P-2595-1

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The author concludes that the falling out of our two major antagonists does not remove any of the intractable problems with which we are faced, and in some respects, complicates them. He asserts also that the Sino- Soviet dispute may be advantageous to the West only in the long run when the corrosive acids of nationalism might ultimately split the Bloc assunder.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278476

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INFLUENCE OF THE EARTH'S CORE UPON THE RATE OF THE EARTH'S ROTATION

Personal Author(s):

VESTINE,E H

Report Date:

Jul 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) AD-278 477 Div. 20 U (TISTP/TL) OTS price \$3.60 RAND Corp., Santa Monica, Calif. SOLUTIONS TO THE CRITICALITY PROBLEM FOR SPHERES AND SLABS, by A. Leonard and T. W. Mullikin. July 62, 27p. incl. 10 refs. (Memo. no. RM-3256-PR) (Contract AF 49(638)70 Proj. RAND) Unclassified report DESCRIPTORS: *She ts, *Spheres, *Homogeneous reactors, *Neutrons, *Scattering, *Integral transforms, Density, Integral equations, Critical assemblies. A study is presented of the problem of determining the relation between the critical size of homogeneous slab and spherical reactors and neutron production, with the assumption that the energy of neutrons is constant. Equations are derived for the slab with anisotropic scattering, the solution of these equations is studied for isotropic scattering. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278709

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE PERTURBED MOTION OF A LUNAR SATELLITE

Personal Author(s):

SCHECHTER, H B

Report Date:

Jul 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Pontecoulant's solution of the three-body problem of the lunar theory is briefly discussed and applied to the motion of a lunar satellite perturbed by the Earth in order to obtain an estimate of the changes caused in the radial coordinate. It was found that the maximum decrease in nominal perilunar radius $r_{sub P}$ depends on the ratio m of the angular velocities of the perturbing body and the satellite, and on an eccentricity parameter e in the combination $2em(1 + e)r_{sub P}$. For a satellite with an orbital period approximately 1/15 that of the Moon, and an eccentricity parameter of 0.2, this decrease

amounts to about 3 per cent of perilunar radius, which is not an appreciable amount. The additional perturbation caused by the sun was found to be of negligible magnitude. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278490

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TWO CONVOLUTION TRANSFORMS WHICH ARE INVERTED BY CONVOLUTIONS

Personal Author(s):

WIDDER,D V

Report Date:

Jul 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Mathematical research concerning the inversion of a convolution transform in which the kernel is a Legendre polynomial is presented. Classes of integral equations of the sort studied here arise in the determination of solutions of certain velocity-potential problems in aerodynamics. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278473

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/278473.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD278473>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Similarity Solution for Cylindrical Magnetohydrodynamic Blast Waves

Personal Author(s):

Greifinger, Carl

Cole, Julian D

Report Date:

Jul 1962

Media Count:

43 Page(s)

Report Number(s):

RAND-RM-3054-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for Public Release; Distribution Unlimited

Abstract:

(U) This analysis is primarily concerned with the interaction between the flow of an ionized gas and a magnetic field. The particular problem treated corresponds very closely to conditions existing in exploding wire experiments, and should prove useful in interpreting the results of such experiments.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278477

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLUTIONS TO THE CRITICALITY PROBLEM FOR SPHERES AND SLABS

Personal Author(s):

LEONARD,A

MULLIKIN,T W

Report Date:

Jul 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0282050

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECTS OF COSMIC RADIATION ON THE EXTREMELY LOW FREQUENCY PROPERTIES OF THE MESOSPHERE,

Personal Author(s):

Goldberg,P A

Report Date:

Jul 1962

Media Count:

27 Page(s)

Report Number(s):

RM-3230-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) At extremely low frequencies (1 to 3000 cps), relatively slight amounts of ionization can produce notable effects on electromagnetic phenomena in the terrestrial system. Representative atmospheric conditions are examined to find minimum conditions that can produce such strong ELF effects at geophysically quiet periods. Based on analyses of ion production parameters it is found that even for quiet nights, when only cosmic radiation is important for producing ionization in the mesosphere, large refractivities can be produced in this portion of the atmosphere below the ionosphere. For even a minimum electron detachment condition the refractive index of the mesosphere has the large magnitude of 4 at an altitude 75 km. For a more inclusive ion production condition with a maximum detachment factor that collates with VLF observations, strong refractivity effects occur at quite low altitudes; namely 35 km at 1 cps, 50 km at 10 cps, 55 km at 100 cps, and 65 km at 1000 cps. At VLF frequencies (10 KC and above) effective altitudes for the night time lower ionosphere take on values normally assumed. During daytime and active solar periods it is indicated that strong refractivity effects will occur at altitudes below 30 km. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604670

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN INTRODUCTION TO INFORMATION THEORY,

Personal Author(s):

Marcus,Michael

Report Date:

Jul 1962

Media Count:

25 Page(s)

Report Number(s):

P-2609

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Information theory is concerned with developing a framework for the study of communication systems and their capacity to transmit messages in the presence of natural disturbances. The information function or entropy of a message source gives a quantitative measure of the usefulness of the source for transmitting messages. The capacity of the channel over which the message is being transmitted, gives a measure of the most efficient communication of information possible under given conditions. This subject is developed in a purely mathematical fashion and by making reference to descriptive concepts in electrical engineering.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0625352

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME ASPECTS OF AUTOMATIC TEST AND CHECKOUT IN MISSILE AND SPACE SYSTEMS,

Personal Author(s):

Mast,L T

Report Date:

Jul 1962

Media Count:

27 Page(s)

Report Number(s):

P-2590

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) When portions of the factory-to-launch sequence of a missile or space system require automation, the extent of automation and the timing of the introduction of aerospace ground equipment (AGE) should be the result of cost effectiveness studies. The test plan, man-machine capabilities and

limitations, relative gain to other alternative approaches, costs, and schedule influences should enter this study. The introduction of automatic AGE involves risks to the mission success rate of the missile or space system. In addition, the installation and checkout of automatic AGE is usually a troublesome process. Schedules and program costs can be adversely effected. To minimize these dangers, a building block approach to automation of AGE is recommended. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA081351

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) An Experimental Application of the Delphi Method to the Use of Experts.

Descriptive Note:

Memorandum rept.,

Personal Author(s):

Dalkey,Norman

Helmer,Olaf

Report Date:

Jul 1962

Media Count:

22 Page(s)

Report Number(s):

RAND/RM-727-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper gives an account of an experiment in the use of the so-called DELPHI method, which was devised in order to obtain the most reliable opinion consensus of a group of experts by subjecting them to a series of questionnaires in depth interspersed with controlled opinion feedback. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0277519

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIMPLEX METHOD AND THEORY. NOTES ON LINEAR PROGRAMMING AND EXTENSIONS - PART 62

Personal Author(s):

TUCKER,A W

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The simplex method of linear programming is discussed in a format designed to exhibit overall structure rather than specific operational details. Various terminal possibilities are represented schematically and geometrically, and it is shown that transposition duality theorems can be regarded as corollaries of the duality theorem for a homogeneous linear program. Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605776

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYSIS BY MIGRATION IN THE PRESENCE OF CHEMICAL REACTION,

Personal Author(s):

Shapiro, Norman

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Number(s):

P-2596

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents a mathematical framework which will allow quantitative analysis techniques using molecule migration rate differences (such as electrophoresis, ultracentrifugation, countercurrent distribution, column or paper chromatography, various diffusion techniques etc.) to be used even in the presence of non-negligible chemical reactions amongst the species.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0282241

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUPPORTS IN SEMI-SIMPLE RINGS,

Personal Author(s):

Osborn, Howard

Report Date:

Jun 1962

Media Count:

7 Page(s)

Report Number(s):

RM-3211-PR

Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0400664
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/400664.pdf
Size: 749 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD400664>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) MISSILES FOR FRANCE
Personal Author(s):
Hoag, Malcolm W
Report Date:
Jun 1962
Media Count:
23 Page(s)
Report Number(s):
XC-AFRDC
Monitor Series:
AFRDC
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276534

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPUTATIONAL PROCEDURE FOR OPTIMAL SYSTEM DESIGN AND UTILIZATION

Personal Author(s):

BELLMAN,R

KAGIWADA,H

KALABA,R

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276935

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METEOROLOGICAL-GEOLOGICAL INVESTIGATIONS OF THE WUPATKI BLOWHOLE SYSTEM

Personal Author(s):

SARTOR,J D

LAMAR,D L

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Using meteorological and geological methods, a vast, inaccessible underground system of cavities in the Wupatki area of north central Arizona was investigated. The existence of some form of underground cavity is betrayed by drafts of wind, alternately entering and emerging from small blowholes and dry wells in the area. The blowhole-and-cavity system appears to be associated with fault fissures and solution-formed passages in the thick beds of the local Kaibab limestone and Coconino sandstone. By comparing the air intake and output of the blowholes with barometric pressure, the investigators estimated that the cavity had a volume of at least seven billion cubic feet. Tracers proved the interconnection of blowholes in areas at least 24 miles apart. A gravity survey indicated the absence of large caverns (in the local area, at least), suggesting rather, sinuous or multiply branched passages linking the holes and wells. Besides developing a research tool of various potential uses, the project indicated a possible relationship between the system of caverns and the underground water drainage of the Flagstaff-Wupatki region. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0283270

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING APPLIED TO CONTROL PROCESSES GOVERNED BY GENERAL FUNCTIONAL EQUATIONS

Personal Author(s):

BELLMAN,RICHARD

KALABA,ROBERT

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The fundamental equation technique of dynamic programming is applied to the study of control processes governed by equations of quite general type. Of particular interest are processes with time lags (differential-difference equations) and processes with distributed parameters (partial differential equations). (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276535

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PRECESSION OF SPINNING BODIES DUE TO GRAVITATIONAL GRADIENT TORQUES

Personal Author(s):

GARBER, T B

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The results are presented of an analytical investigation of the precessional motion of spinning bodies due to gravitational gradient torques. The motion of the center of mass of the body is restricted to circular or nearcircular orbits. However, the secular regression of the orbital plane due to the earth's oblateness is considered. In the analysis of the rotational motion of the body about its center of mass, it is assumed that the gravitational gradient torques are small perturbations. The unperturbed body is perfectly stabilized with respect to inertial space. Within this framework, solutions are obtained for the precessional motion of a body with an arbitrary mass distribution. It is concluded that for low spin rates of the order of 0.1 rad/sec, the change in body attitude due to the gravitational gradient torques alone

might be as great as 17 degrees after a period of five days. For a gyroscopic instrument with a spin rate of 2000 rad/sec, an attitude error of 1 min. can develop after a period of 40 days. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605857

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REPORT ON AN URBAN TRANSPORTATION MODEL, SOME PROGRESS AND SOME PROBLEMS,

Personal Author(s):

Kain,John F

Report Date:

Jun 1962

Media Count:

8 Page(s)

Report Number(s):

P-2549

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An exploratory study of urban transportation is described. The skills of engineers and social scientists were combined to carry out a systems analysis embracing both the engineering and economic questions of urban transportation. The study was not tied to solving the urban transportation problems of any specific municipality or urban area; it was decided that RAND should attempt to utilize and integrate the findings and data obtained by the large and expensive urban-planning and transportation studies conducted during recent years in major urban areas. In particular, it was felt that the large amounts of data obtained for these studies had not been fully exploited. A substantial program of empirical research, drawing on this large pool of empirical information, was also decided upon.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0277520

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TWO OPERATORS FOR DETERMINING AGREEMENT (FOR AUTOMATIC SYNTACTIC ANALYSIS)

Personal Author(s):

MEL'CHUK, I A

MOHR, DOLORES V

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) TWO INTERRELATED PROGRAMS ARE PRESENTED FOR AUTOMATIC ANALYSIS OF Russian sentences -- or of sentences in any language characterized by grammatical agreement among certain word classes which must be tested in order to derive the proper syntactic structure for each sentence being processed.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276933

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET NATIONAL INCOME AND PRODUCT, 1956-1958

Personal Author(s):
NIMITZ,NANCY
Report Date:
Jun 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0282240
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON SOME QUESTIONS ARISING IN THE APPROXIMATE SOLUTION OF NONLINEAR DIFFERENTIAL EQUATIONS,
Personal Author(s):
Bellman ,Richard
Richardson,John M
Report Date:
Jun 1962
Media Count:
15 Page(s)
Report Number(s):
RM-3180-PR
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:

(U) A new approach to the approximate solution of nonlinear differential equations is explored. The basic idea is to rewrite the nonlinear equations in the form of an infinite sequence of coupled linear

equations by application of the Carleman linearization process. The sequence is truncated at a finite stage by a linear closure approximation involving the minimization of the mean square error. Attention is given to the stability of the truncated sequence of linear equations with respect to propagation of error due to closure back to the earlier members of the sequence. The use of suitably defined orthogonal polynomials to simplify closure approximations is considered. The generalization of the general method to the multidimensional case is treated. Consideration is given to the concept of self-consistent closure methods in which the averaging of the squared closure error depends upon the approximate linear equations derived thereby. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0277045

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GENERATION OF PERMUTATIONS BY ADJACENT TRANSPOSITION

Personal Author(s):

JOHNSON, SELMER M

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276152

Corporate Author:
RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) SUPRASYNACTICS

Personal Author(s):
WORTH,DEAN S

Report Date:
Jun 1962

Media Count:
1 Page(s)

Report Classification:
Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:
(U) This Memorandum, part of a continuing study of Russian and English syntactic structure, proposes an explanatory model of the suprasyntactic structures of negation, interrogation, and especially emphasis. This last category is treated as a formal linguistic operation parallel to negation and interrogation. All three categories are best described as operations (transformations) performed upon the various nodes and terminal units in a phrase structure (immediate constituent) tree, from the entire sian, German, French, and Czech. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0278485

Corporate Author:
RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) NOTE ON AN AXIALLY SYMMETRIC EXPANSION BEHIND A BODY IN HYPERSONIC FLOW

Personal Author(s):
MEYER,RICHARD E

Report Date:
Jun 1962

Media Count:
1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The flow near the rim of the flat base of a body of revolution is studied to establish the effect which axial symmetry has on the expansion process taking place there. It is shown that this effect decreases markedly with increasing flight Mach number. The pressure gradient and streamline curvature at the rim of the base are calculated, since they would be required for any detailed computations concerning the back pressure. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278487

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE PROPAGATION OF AERODYNAMIC DISTURBANCES FAR FROM A BODY RISING THROUGH THE ATMOSPHERE

Personal Author(s):

MEYER,RICHARD E

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The far field of a body rising vertically at supersonic speed is studied through the acoustic approximation to obtain an insight into the effect which the atmospheric density stratification has on the propagation of the shocks and pressure waves generated by the body. Apart from the density stratification per se, the gravitational acceleration is found to have a major influence when the waves are followed over heights of several miles or more. The absolute pressure and density perturbations due

to the body decrease with height while the velocity and particle displacement increase. The decay of the perturbation behind the shock is oscillatory, in contrast to its monotonic character in a uniform medium. At any point at considerable height and distance from the flight path, the air will experience a sudden, surprisingly large, upward and outward displacement, followed by a reversal and oscillatory decay in time. The natural decay of the perturbation with distance from the body is counteracted by certain effects. The acoustic results obtained usually give a reliable picture of the wave propagation up to heights of the order of 50 km. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278488

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INFERENCE OF MONTE CARLO PROPERTIES FROM THE SOLUTION OF A KNOWN PROBLEM

Personal Author(s):

MARCUM,J I

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A machine code was set up which was used to obtain 10,000 runs of 10 samples each from a distribution function that is a reasonable approximation to sampling distributions found in several Monte Carlo transport codes. Histograms of the probability density function for the mean value, of the standard deviation of the mean and of Student's ratio of 10 samples were obtained. Because the standard deviation has an infinite expected value, it is of doubtful usefulness in measuring the probable error of, or placing confidence limits on, the mean value of the sample. Results show that with proper precautions the sample standard deviation may be used to establish confidence limits on the sample mean in spite of the fact that it has an infinite expected value. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278486

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DESIGN AND TEST AT MACH NUMBER 2.5 OF TWO LOW-WAVE-DRAG RING-WING CONFIGURATIONS OF ASPECT RATIO 1.3 AND 2.6

Personal Author(s):

BROWAND,FREDERICK K

BEANE,BEVERLY J

NOWLAN,DANIEL T

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An approximate scheme for the design of ringwing configurations which have almost no supersonic wave drag (at zero angle of attack and design Mach number 2.5) is described. This method is based on the Whitham correction to linearized small-perturbation theory. Windtunnel tests of two configurations designed by this method tend to verify the predicted wavedrag reduction. Discrepancies with the theoretical calculations are due mainly to their assumption of inviscid, isentropic flow. It appears probable that the design method could be improved by allowing for boundary-layer growth and for shock formation. The results of measurements of the lift, drag and pitching moment of the test models at angle of attack are included. All tests were conducted at the design Mach number 2.5. Whenever possible, the measured results are compared with theoretical predictions and the agreement is generally good. The presence of the horizontal pair of the cruciform struts and the body served to reduce the lifting drag factor of the complete configuration about 10 per cent from that of the ring wing alone. The necessary struts can be designed so that their drag is of the order of 5 per cent of the configuration drag. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278484

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROPORTIONS OF PRESSURE-VESSEL HEADS DESIGNED FOR MINIMUM WEIGHT BY THE MISES YIELD CRITERION

Personal Author(s):

HOFFMAN,GEORGE A

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The minimal-weight shapes of head closures for long cylindrical pressure vessels, such as rocket tanks and pressurized fuselages, are derived. Head geometries, weights, and stresses are calculated for thin-shell heads of isotropic materials with uniform internal pressure by restricting tensile stresses to the plasticity ellipse--the limiting curve of yielding. Ellipsoidal and torispherical domes of varying thickness are derived by considering membrane stresses only, these highly efficient shapes being shallower and weighing up to 15 per cent less than the corresponding hemispherical capping closure. The least-weight ovaloid shape that avoids discontinuity stresses near the cylinder-dome juncture is evaluated, and it appears that the choice of head shapes based on this last criterion leads to heads that are heavier and deeper than pure membrane shapes that have the additional shell thickness required by the juncture stresses. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278471

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STATISTICAL MANAGEMENT OF INVENTORY

Personal Author(s):

CAHN,A S

WAGNER,H M

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum discusses the use of statistical aggregates to improve inventory management, and methods to evaluate control scheme based on their use. To examine a control system, six stages of analysis are useful: (1) deciding what operations warrant control; (2) ascertaining what actions are available to constrain operating decisions; (3) deciding to whom control responsibilities shall be delegated; (4) evaluating the economic worth of the control system objectives, including the cost of making mistakes during the process of controlling; (5) examining the operating characteristics of the control system; and (6) synthesizing previous information for economic evaluation of the entire control system. The framework for the analysis is 'statistical decision theory.' THE Memorandum presents an illustrative example which is complex enough to demonstrate the points involved. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607504

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXTREME MODEL ATMOSPHERE OF MARS,

Personal Author(s):

Schilling, Gerhard F

Report Date:

Jun 1962

Media Count:

8 Page(s)

Report Number(s):

P-2600

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Theoretical models of the atmosphere of Mars were computed on the basis of present factual knowledge with a minimum of assumptions. The resultant model atmosphere gives extreme upper and lower limits for pressure, temperature, and density in the Martian atmosphere up to 150 km altitude. While this rigorous method yielded reliable data needed for the engineering design of space probes, the spread of values is still extremely wide and indicative of the present scarcity of knowledge. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293424

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MILITARY PROCUREMENT AND CONTRACTING: AN ECONOMIC ANALYSIS

Personal Author(s):

MOORE,FREDERICK T

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604820
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) OBJECTIVES OF USE OF INDIGENOUS RESOURCES FOR MANNED EXTRATERRESTRIAL BASES,
Personal Author(s):
STEINHOFF,E A
Report Date:
Jun 1962
Media Count:
8 Page(s)
Report Number(s):
P-2604
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:
(U) An analysis of the support requirements for manned Mars missions is presented. Considered in the discussion are the costs and problems of life support which would be involved in the establishment of extraterrestrial bases.
Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606692

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONTINUOUS GAMES WITH PERFECT INFORMATION,

Personal Author(s):

Mycielski,Jan

Report Date:

Jun 1962

Media Count:

16 Page(s)

Report Number(s):

P-2591

Contract Number:

NSF G6693 nsf

G14006

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper contains several remarks and results on the application of general theorems on infinite games with perfect information to some special games of that kind and also the games of pursuit and evasion.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604801

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COMMERCIAL USES OF COMMUNICATIONS SATELLITES,

Personal Author(s):

Johnson,Leland L

Report Date:

Jun 1962

Media Count:

20 Page(s)

Report Number(s):

P-2601

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to appraise briefly the relative merits of communications satellites and conventional techniques, and to provide a more realistic notion of the potential role of communication satellites. Primary emphasis is placed on use in underdeveloped countries.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276533

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING, INTELLIGENT MACHINES, AND SELF-ORGANIZING SYSTEMS

Personal Author(s):

BELLMAN,RICHARD

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Aspects of problem formulation and problem solution are discussed. In particular, the relevance of these matters to the field of intelligent machines and some connections with the theory and application

of dynamic programming are treated. The practical application of scientific philosophy as a technique to guide research and to avoid undue waste of time, energy, and talent is developed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0287997

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COSTING TOMORROW:S WEAPON. SYSTEMS

Personal Author(s):

NOVICK,DAVID

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Costing tomorrow's weapon systems is a difficult and uncertain but essential process: essential for budget preparation and essential for major program decisions. As far as the first application is concerned it is difficult to conceive of budgeting for a weapon system project without cost estimates, regardless of their validity. The decision-making application is more controversial. As a result of some very low estimates in the past, some analysts have taken the position that the use of cost estimates in systems analysis should be minimized or even eliminated. The basic flaw in this argument is that poor cost estimates are merely a reflection of the in-ADEQUACIES OF WEAPON SYSTEM DESIGNERS AND PLANNERS. Cost analysts work from a program description provided by the other members of the team, and by far the most significant variance between initial estimates and final costs are due to changes in the original requirements rather than to an inappropriate price tag hung on an unchanging configuration. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0287060

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RESOLUTION OF THE SOVIET CONTROVERSY OVER CIVIL DEFENSE

Personal Author(s):

GOURE, LEON

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some recent developments in the Soviet civil defense program are described. Differences between foreign and domestic Soviet propaganda on civil defense are listed, and a debate among the Soviet leaders on the value of civil defense is described -- a debate that was resolved at the May 1962 Congress of DOSAAF (the civil volunteer organization). Recent vigorous endorsement of DOSAAF by Party and press may be one indication of impending changes in Soviet domestic and foreign policies. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0277521

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EUROPEAN COAL AND STEEL COMMUNITY

Personal Author(s):

NICHOLS,R T

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0612431

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STRATEGIC SURPRISE IN THE KOREAN WAR,

Personal Author(s):

DEWeerd,H A

Report Date:

Jun 1962

Media Count:

36 Page(s)

Report Number(s):

P-1800-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Three assumptions seem to have developed after Pearl Harbor about intelligence problems relating to surprise attack. One is that if intelligence teams collect everything, they will be reasonably sure not to miss key intelligence items. The second is that improved coordination between organizations and a wider sharing of intelligence data between individuals and organizations will help safeguard the United States against surprise. The third belief is that because the U. S. needs to have strategic warning in order

to survive in the age of nuclear plenty, it will somehow get this warning and will make the necessary responses. The purpose of the paper is to urge a review of these assumptions in the light of the Korean war experience of the United States. It calls attention to the importance of the prevailing climate of military-political opinion in the evaluation of intelligence materials.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276530

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SEQUENTIAL ESTIMATION AND DETECTION OF SIGNALS IN NORMAL NOISE

Personal Author(s):

SELIN,IVAN

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The sequential detection of signals in stationary, normal, colored noise is discussed. Two classes of signals are considered: signals which are known exactly, and signals known except for a finite number of parameters. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0633997

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ECONOMIC IMPORTANCE OF SPACE TECHNOLOGY,

Personal Author(s):

MECKLING, William H

Report Date:

Jun 1962

Media Count:

9 Page(s)

Report Number(s):

P-2585

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The exploration of space is a very exciting affair indeed. If glamour displaces science in guiding national policy, however, the results may be very disappointing. A communication satellite system that charges prices not very much different from present prices and that must be constantly subsidized and protected from competition, is not much of an accomplishment, and may be the subject of ridicule rather than admiration.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278261

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPOUND SIMPLE GAMES I: SOLUTIONS OF SUMS AND PRODUCTS

Personal Author(s):

SHAPLEY, L S

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This is an investigation of the solutions of the games that are formed by combining two or more simple games, played by separate groups of individuals. A simple game is one that is completely specified by its winning coalitions. Two forms of combination are studied in detail in this Memorandum: the sum, in which a coalition wins if it wins in either component, and the product, in which a coalition wins only if it wins in both components. In both cases, relationships are established between the solutions of the compound games and those of the components. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278263

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UNIQUENESS PROBLEMS IN THE MATHEMATICS OF MULTIPLE SCATTERING

Personal Author(s):

MULLIKIN, T W

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some recent mathematical studies concerning the uniqueness of solutions to Chandrasekhar's mathematical formulation of principles of invariance in the theory of radiative transfer are reported. It is

shown that the X and Y equations and the psi and phi equations of Chandrasekhar have a multiplicity of solutions for many phase functions describing local scattering, the extent of the nonuniqueness having been only partially explored by Chandrasekhar. The present results should be of interest and concern to those attempting to solve these equations by numerical iteration. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0299514

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DIFFERENTIAL CORRECTION PROCESS FOR NEARLY CIRCULAR ORBITS

Personal Author(s):

SMITH,F T

Report Date:

22 May 1962

Media Count:

1 Page(s)

Report Number(s):

661751120D906

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0275785

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET AGRICULTURAL PROGRAM. AN EVALUATION OF THE 1965 GOALS

Personal Author(s):

JOHNSON,D GALE

KAHAN,ARCADIUS

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This study evaluates the feasibility of the Seven Year Plan goals for 11 basic agricultural commodities (grain, potatoes, vegetables, oil seeds, sugar beets, cotton, flax fiber, meat, milk, eggs, and wool). The planned increase in aggregate output of these commodities between 1958 and 1965 is 62 per cent when outputs are valued at 1958 procurement prices. Over fourfifths of the planned increase is accounted for by feed and livestock products. The authors' estimates assume that sown area will increase by not more than 10 per cent, that machinery inputs will approach the planned level, that mineral fertilizer inputs will be about 30 per cent below plan, and that there will be significant improvements in efficiency. The goals for the technical or industrial crops (cotton, flax fiber, oil seeds, and sugar beets) can probably be met if they receive top priority. The estimated increase in feed might permit an increase in livestock output of 36 per cent (far below plan). Assuming normal weather, aggregate output of the 11 commodities considered might increase by 24 per cent (compared with the planned increase of 62 per cent). (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276721

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMAL REPLACEMENT POLICIES FOR A BALLISTIC MISSILE

Personal Author(s):

JORGENSEN,D W

MCCALL,J J

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Ballistic missile system replacement policies are discussed for equipment subject to stochastic failures in which the actual state of the system, good or failed, is not known with certainty. Although these policies are applied only to the missile itself, optimal maintenance policies for the system as a whole are conceptually similar. The criterion employed for comparison of alternative maintenance policies is to minimize the total cost per expected piece of equipment good per period of time. Maximization of system reliability is a special case of this criterion which ignores the financial costs of maintenance actions. For illustrative purposes, optimal policies are computed for a hypothetical ballistic missile system. They are then compared with each other and with a rule of thumb frequently proposed for replacement policy: Replace at the mean time to failure. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0275623

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECT OF CARGO CHARACTERISTICS ON ROUTINE AIRLIFT OPERATIONS

Personal Author(s):

PASCAL,A H

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276532

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNIST CHINA'S PETROLEUM SITUATION

Personal Author(s):

YEH,K C

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Available data are given on the production, imports, and consumption of petroleum in Communist China in 1949-60. Prospects of expanding indigenous production and reducing dependence on imports from the Soviet Union are discussed. Some findings are Communist China's output of crude oil increased by more than ten times in the past decade; the petroleum industry has made extremely rapid progress, but the absolute level of production still falls short of meeting domestic demand. In 1960, about one-half of the total supply of major petroleum products came from the Soviet Union, but this proportion is steadily declining. Total supply in absolute terms -- some 5 million tons in 1960 -- is still very small for an economy of China's size; in per-capita terms it is miniscule by the standard of developed economies. Clearly, this is one area in which Soviet trade policy could have serious consequences for China's future petroleum development. A cut in Soviet exports of petroleum and equipment would leave China in a position where current and near-future domestic supplies of petroleum would be insufficient to meet expected, or even normal, demand. Consequences of such action are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276365

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEW EVIDENCE CONCERNING THE ORIGIN OF FATIGUE CRACKS AS A SURFACE PHENOMENON

Personal Author(s):

SHANLEY,F R

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Recent results from studies of surface effects, particularly at ultra-high vacuum, are reviewed with respect to the origin and growth of fatigue cracks. These results appear to offer new evidence tending to substantiate an earlier theory of fatigue proposed by the author. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0275933

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Orbit Determination as a Multipoint Boundary Value Problem and Quasilinearization,

Report Date:

May 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0276720
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) OPTIMAL SCHEDULING OF REPLACEMENT AND INSPECTION
Personal Author(s):
JORGENSEN,D W
MCCALL,J J
Report Date:
May 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The results are summarized of research on the optimal scheduling of replacement and inspection of equipment for which the preparedness model is appropriate. Periodic policies are discussed for inspection or replacement of equipment consisting of a single stochastically failing module. Techniques are given for computing optimal inspection or replacement intervals, first under the assumption that the distribution of times to failure of the stochastically failing module is known, and secondly under the assumption that the form of the distribution is known but the failure rate is unknown. Optimal policies are discussed for replacement, for inspection, and for both jointly. The formal analogy is demonstrated between minimization of cost and minimization of the proportion of downtime. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276083

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECT OF CUTOFF LATITUDE ON CUTOFF CONDITIONS FOR TRANSFER ORBITS TO VENUS

Personal Author(s):

ROWELL,L N

HUBER,C R

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The possible energy advantage to be gained by using a parking orbit for injecting into the hyperbolic escape was studied. This study may be helpful in the detection and tracking of un-ANNOUNCED SPACE PROBES, AND IN DEMONSTRATING THE ADVANTAGE OF USING PARKING ORBITS FOR U. S. space shots.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276368

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VALUES OF LARGE GAMES. VI: EVALUATING THE ELECTORAL COLLEGE EXACTLY

Personal Author(s):

MANN,IRWIN

SHAPLEY,L S

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The electoral college is used as an application for the theory of games and the use of the power index. It is a relatively large game and the exact calculation until recently has not been feasible. The results have some sociological, as well as mathematical, interest; they are given for three different cases. Results demonstrate that there is a bias in favor of the large states as against the small of as much as five per cent on a pure mathematical basis solely. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276150

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/276150.pdf

Size: 590 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD276150>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) POINT ESTIMATION OF RELIABILITY FROM RESULTS OF A SMALL NUMBER OF TRIALS

Descriptive Note:

Memorandum

Personal Author(s):

Typados, Z A

Brimley, D E

Report Date:

May 1962

Media Count:

20 Page(s)

Report Number(s):

RAND-RM-3044-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A new approach to the estimation of reliability is presented on the basis of a few trials. In this new method, based on information theory concepts, when the probability of success is not known, the proposed way to assign probabilities is to maximize the measure of uncertainty. This point- estimation method is characterized by less extreme fluctuations in estimates as the results of Bernoulli trials become known.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276082

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/276082.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD276082>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DETERMINATION OF INTERPLANETARY TRANSFER ORBITS FOR SPECIFIED DATE OF DEPARTURE

Descriptive Note:

Memo.

Personal Author(s):

SCHECHTER, H B

Report Date:

May 1962

Media Count:

54 Page(s)

Report Number(s):

XC-RTD

Contract Number:

RM-2621-PR

Monitor Series:

RTD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method of solution is presented which enables one to determine arbitrary transfer orbits quickly and accurately using only a desk computer. Coplanar, as well as three-dimensional, surfaceto-surface trips were investigated, and account was taken of the eccentric shape of the planetary orbits. A number of transfer orbits from Earth to Mars were computed for two arbitrarily selected dates of departure. The numerical results are summarized in a series of curves which display the characteristic velocity expenditures for trips of various durations, as well as the orientation of the departure velocity vector.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276081

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RECENT DEVELOPMENTS IN NONLINEAR PROGRAMMING

Personal Author(s):

WOLFE, PHILIP

Report Date:

May 1962

Media Count:

40 Page(s)

Contract Number:

AF 49(638)700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0275526

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMAL DECISION RULES FOR THE PROCUREMENT, REPAIR, OR DISPOSAL OF SPARE PARTS

Personal Author(s):

PHELPS, E S

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A theoretical analysis of a fundamental Air Force logistics problem is presented, namely the procurement-repair-disposal tradeoff. This study should be of interest to mathematicians and other technical analysts concerned with the use of mathematical techniques in programming and planning problems. This study contains an unusual application of dynamic programming. In most such applications, the programming problem is to determine the value of a single policy variable; whereas in

this study, the values of two policy variables are simultaneously determined. The simplifying assumptions used in the model do not distort the problem unduly, and it is possible to relax them if future research indicates the desirability of doing so. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606416

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMETRIC VARIATIONS ON A THEME BY SCHNEIDER,

Personal Author(s):

Massell,Benton F

Report Date:

May 1962

Media Count:

8 Page(s)

Report Number(s):

P-2582

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In a recent paper, Harold K. Schneider provides an interesting and provocative analysis of the economic activities of the Turu, an aboriginal tribe in the central part of Tanganyika. He provides evidence that the Turu are, to a large extent, motivated by economic considerations, notably, maximization of profit and accumulation of wealth. While he stops short of a quantitative analysis of the Turu economy, Professor Schneider does provide some excellent data relating to agricultural production, the principal Turu occupation. The present paper presents an analysis of these data, using elementary econometric techniques. Thus Schneider's qualitative observations on the relationship among the variables are supplemented by a more formal treatment that involves fitting a production function to cross-section data, using multiple regression analysis. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604794

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DEMAND FOR ALCOHOLIC BEVERAGES. AN EXPERIMENT IN ECONOMETRIC METHOD,

Personal Author(s):

Niskanen,W A

Report Date:

May 1962

Media Count:

94 Page(s)

Report Number(s):

P-2583

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Consumers of alcoholic beverages pay higher taxes and are confronted by more extensive public controls than apply to any other major product. A thorough evaluation of the structure of taxes and controls, however, has not been made, since the aggregate characteristics of this market have been poorly understood. The study is designed to provide the basic quantitative framework for an evaluation of these programs. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604576

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EUROPEAN COMMUNITY AND THE SOVIET BLOC,

Personal Author(s):

Mendershausen,Horst

Report Date:

May 1962

Media Count:

17 Page(s)

Report Number(s):

P-2577

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper assesses the implications of European unification, particularly economic unification, for the Soviet Bloc.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278467

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A METHOD OF CORRELATING CRITICAL CONDITIONS OF HOMOGENEOUS BARE REACTORS
CONTAINING A RESONANCE ABSORBER

Personal Author(s):

PINKEL,B

YOUNG,G B W

LEONARD,A

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The effect on reactor criticality of a material having strong resonance absorption bands is discussed. Whereas current methods for calculating the effect of various materials on the uranium requirement of the reactor involve the use of electronic computers, the simplified method presented enables calculation to be made rapidly by hand. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0625354

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYMPOSIUM ON METEOROLOGICAL ROCKETS,

Personal Author(s):

Kellogg, W W

Report Date:

May 1962

Media Count:

20 Page(s)

Report Number(s):

P-2580

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604539

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON THE AGE OF THE EARTH--MOON SYSTEM,

Personal Author(s):

LAMAR,D L

Report Date:

May 1962

Media Count:

4 Page(s)

Report Number(s):

P-2551

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607389

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETECTION OF MESOSPHERIC CLOUDS FROM A SATELLITE,

Personal Author(s):

Deirmedjian,Diran

Report Date:

May 1962

Media Count:

12 Page(s)

Report Number(s):

P-2579

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The possibility of the photometric detection of mesospheric clouds from a low polar orbit satellite is discussed. As an example, it is shown that noctilucent clouds, under certain conditions, should be easily detectable at latitudes and seasons which are not suited to ground based observations. A simple satellite experiment is described which would also yield some data on the nature of the cloud particles.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604802

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604802.pdf

Size: 3 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604802>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Long-Lasting Effects of LSD on Certain Attitudes in Normals: An Experimental Proposal

Personal Author(s):

McGlothlin, William H

Report Date:

May 1962

Media Count:

61 Page(s)

Report Number(s):

P-2575

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) Research into the long-lasting effects of administering d-lysergic acid diethylamide (LSD) to normals is discussed. In addition to its use in psychotherapy, there were some reports of experimental subjects who claim lasting beneficial effects attributable to the LSD experience. In particular, two follow-up questionnaire studies indicated that normal subjects frequently claim changes in personality resulting from only one or two administrations of LSD, and these claims were maintained after periods of a year or more. These results are subject to the weaknesses of the questionnaire method; but, when considered along with some of the literature on the use of LSD in psychotherapy, they appear to be sufficiently suggestive to warrant more controlled experiments in this area. An experiment is suggested which would attempt to measure any long-lasting changes in attitudes, values, and communicative ability resulting from the administration of LSD. In particular, the measures would concentrate on changes in closed-mindedness as reflected by scales of dogmatism, opinionation, and ethnocentricity.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603146

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPERATING SYSTEMS,

Personal Author(s):

Mealy, George H

Report Date:

May 1962

Media Count:

103 Page(s)

Report Number(s):

P 2584

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Operating systems in this paper is defined as the whole complex of programming (Computers), debugging, and operational aids with which the programmer deals. For the purposes of discussion, the components of an operating system are divided into three categories: (1) Input-output systems: Codes which, in conjunction with the hardware, get data in and out of the machine. (2) Processors: Codes which transform data. (3) Supervisory systems: Codes which are responsible for job or task sequencing and communication between the programmer and components of the operating system.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0283794

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IDENTIFYING AND ESTIMATING R AND D COSTS

Personal Author(s):

NOAH,J W

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0275518

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INFORMATION SYSTEM DESIGN IN A COMPLEX ORGANIZATION: RAND'S LP-II MANNED SIMULATION

Personal Author(s):

JOHNSON,ROBERT W

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The development of an information system created for a large-scale manned simulation of ICBM tactical support is described. The simulation, known as Laboratory Problem II (LP-II), was conducted in 1958-59. The purpose of LP-II was to develop improved base logistics for a mature wing of intercontinental ballistic missiles. To do so, it was necessary to develop a novel base maintenance and operations information system. The steps leading to the particular system adopted in this experiment are described. The study should be of interest to Air Force personnel responsible for the planning and design of large-scale information systems in such areas as base maintenance management and command and control. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0275499

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AUTOSATE. AN AUTOMATED DATA SYSTEMS ANALYSIS TECHNIQUE

Personal Author(s):

GATTO,O T

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Documentation of an existing system is often required during Air Force data system studies. An automated technique is described that provides information on data system flows and characteristics at the expenditure of considerably less manpower and in a more usable form than was previously possible. This is an interim report on a longer-term study leading to the design of an advanced information system for management of an aircraft/missile base complex in the late 1960's. Since an automated analysis technique for data systems appears to have widespread and immediate use of the Air Force, a preliminary version is described. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0275519

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE POTENTIAL OF BERYLLIUM IN SUPERSONIC COMMERCIAL AIRCRAFT

Personal Author(s):

HOFFMAN,GEORGE A

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A structural comparison is made of Be with the best alloys of Al, Ti, and steel for a variety of applications in supersonic transports. Such applications include components whose design is governed by tension criteria, by compression in stiffened and sandwich panels and in unstiffened plates, and by notched behavior, all over the temperature range to be encountered in future aircraft. It is inferred that a Be structural part might weigh from 1/4 to 1/2 less than the equal-function part made of more conventional metals. Calculations of the economics of Be usage in aircraft follow, consisting of several derivations of the worth-in-use of the weight reduction in commercial transports obtained by substituting a lighter-weight, but costlier, Be component. It is concluded that Be would offer many economic and weight-reducing advantages for transports. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0275442

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MORALE IN WEST BERLIN AFTER THE WALL

Personal Author(s):

HURWITZ, HAROLD

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) THIS Memorandum is a summary of a series of letters and memoranda by a consultant of RAND's Social Science Department who is a long-time resident of Berlin and has been a close observer of morale in the city for the past 15 years. The opinions or suggestions expressed in this Memorandum reflect the personal views of the author. The substance of the Memorandum is based on conversations and personal observation, as well as on material gathered from public opinion polls both before and after August 13, when the Wall between East and West Berlin was erected. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0283795

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IDENTIFYING AND ESTIMATING R AND D COSTS QUIZ, PROBLEMS AND POSSIBLE SOLUTIONS

Personal Author(s):

NOAH, J W

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A quiz and problems designed to test the student's ability to analyze and apply the cost estimating techniques discussed in the text of RM-3067-PR (AD-283 794) are provided. Possible solutions to the quiz and problems with attendant explanations, graphs, and tabulations are presented. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0284268

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE THEORY OF STELLAR RADAR

Personal Author(s):

PRESTON, GLENN W

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Devices which can detect and track objects in space passively, without the need for active RF emanations from earth, have potential value in military operations because they give tactical information without revealing their own locations. The possibility of passive detection and tracking of objects in space near the earth by using the radio frequency energy from the sun and from certain radio stars is considered. Whether or not the computed detection ranges for possible stellar radars compare with those of mediumpower active radars was considered. On the basis of available data they do not. As a surveillance device for the reasonably near future, the stellar or solar radars are apparently only useful in situations which absolutely preclude active RF emanation and where modest detection ranges are valuable. Substantially greater ranges could be achieved if cross-correlation detectors having -80 db detection sensitivity or greater were to be developed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0617262

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLITICAL DOCTRINES AND PRACTICAL POLITICS IN SOUTHEAST ASIA.

Descriptive Note:

Revised ed.,

Personal Author(s):

Pauker, Guy J

Report Date:
16 Apr 1962
Media Count:
19 Page(s)
Report Number(s):
P-2347-1
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0274595
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) LINEAR PROGRAMMING IN A MARKOV CHAIN. NOTES ON LINEAR PROGRAMMING AND
EXTENSIONS. PART 59
Personal Author(s):
DANTZIG,G B
WOLFE,PHILIP
Report Date:
Apr 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:
(U) An infinite Markov process with a finite number of states is considered in which the transition probabilities for each stage range independently over sets that either are finite or are convex polyhedra. A finite computational procedure is given for choosing those transition probabilities which minimize appropriate functions of the resulting equilibrium probabilities. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274599

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IDEALIZED SHEATH THEORY AND SATELLITE CHARGE-UP IN THE VAN ALLEN REGION

Personal Author(s):

MODESITT,G E

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) As an aid in the determination of the electric potential of naturally charged satellites, the concept of the idealized sheath introduced by Langmuir and Mott-Smith is studied in some detail through the use of distribution functions. It is shown that the functions are discontinuous in velocity variables and lead to the same results as particle trajectory theory. The limitations of the sheath theory and its connection with space charge-limited diode theory are discussed. It is shown that, under certain assumptions, the potential on a satellite whose diameter is smaller than the local Debye length will reach 3500 volts negative in the more intense regions of the Van Allen electron belt. The equilibrium potential decreases with increasing size of the satellite, with a limiting value of -35,000 volts for satellites much greater than the Debye length in diameter. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274596

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A LINEAR PROGRAM OF PRAGER'S. NOTES ON LINEAR PROGRAMMING AND EXTENSIONS. PART 60

Personal Author(s):

GROSS,OLIVER

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) For the problem of minimizing the integral $\int_0^1 f(x)dx$ subject to the constraints $-f(x) \leq xg(y) \leq f(x)$ if $0 \leq y \leq 1$, $-f(x) \leq xg(y) - x + y f(x) \leq f(x)$ if $0 \leq y \leq 1$, solutions are given to prove both that they satisfy the constraints and that they have the extremizing property. The problem arose in an elastico-plastic, structural-design context. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274838

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AUGMENTATION ANALYSIS OF THE EINSTEIN GRAVITATIONAL FIELD

Personal Author(s):

EDELEN,DOMINIC G B

Report Date:

Apr 1962

Media Count:

25 Page(s)

Report Number(s):

RM-3092-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The groundwork for investigating the possibility of the control of gravitational fields in the neighborhood of a massive body is considered. The Einstein equations for the gravitational field are examined under the assumption that one knows an exact solution of those equations for a given momentum-energy tensor. The desired solution corresponding to the augmented momentumenergy tensor is assumed to be an augmentation of the metric Gravitational Field. This leads to an exact representation of the field equations of general relativity in a form for which each term is a tensor. The problem of superimposing a weak gravitational field on a known field is investigated, and solutions are obtained by means of an invariant Green's integral tensor. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274594

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE GRAVITATIONAL CONCENTRATION OF PARTICULATE MATTER IN THE SPACE NEAR THE EARTH

Personal Author(s):

DOLE,S H

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A theory that the observed concentration of micrometeoritic material around the earth can be attributed entirely to the earth's gravitational field is presented. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605921

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FRANCE AS A NUCLEAR POWER,

Personal Author(s):

Zoppo,C E

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Number(s):

P-2485

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The military worth of independent national nuclear strike forces has been strongly questioned, but the French government seems bent upon developing such a force nevertheless. Moreover, a number of continental military analysts have attempted to endow this policy with a theoretical basis. The thesis advanced in this report hinges on the assumption that a nation of less than great power status can acquire a nuclear deterrent of its own effective enough to impress a superpower.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604579

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SEQUENTIAL TEST FOR THE PRESENCE OF A SIGNAL IN ONE OF K POSSIBLE POSITIONS,

Personal Author(s):

REED, I S

Selin, Ivan

Report Date:

Apr 1962

Media Count:

17 Page(s)

Report Number(s):

P-2525

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Consideration is given to a simple sequential test for the presence of a signal known except for one parameter i . This parameter may assume only one of k discrete values, k infinity. The distribution of the true parameter value is assumed to be uniform over the parameter space. It is shown that the test is almost a maximum likelihood test. Next it is shown how to set the test parameters in order to achieve desired conditional error probabilities, and an approximate expression is obtained for the distribution of the test termination time. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604674

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DISARMAMENT AND DETERRENCE,

Personal Author(s):

Ferguson, Allen R

Report Date:

Apr 1962

Media Count:

42 Page(s)

Report Number(s):

P-2553

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper has been an attempt to put into perspective deterrence, disarmament, and approaches to peace. The three are viewed as complementary elements in a solution to the problem posed by the political conflict between the democracies and the Soviet Union when both parties have the power of massive destruction. The political conflict appears to arise from the Soviet intention to dominate additional large portions of the world under a system which is apparently entirely incompatible with many values important to the West. Second, it is argued that because of its importance as a political, economic, and military base, Western Europe is a prize of incomparable value to the Soviets if they are intent on world domination. Third, because of the importance of Europe, the Soviets may see hope of success through military action there, with consequent local fighting which may develop into general war. Fourth, it is argued that for the next several years at least the protection of Western Europe must rest ultimately on the threat of nuclear retaliation. Fifth, it follows that the ability to deter aggression in Europe is the major instrument available in the midterm future for reducing the likelihood of general war, that is, for achieving the major objective of disarmament. From this argument some inferences for a general approach to the problem of reducing both the chances and the consequences of war are suggested.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604673

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HEAT TRANSFER RESEARCH IN JAPAN,

Personal Author(s):

Hartnett,J P

Report Date:

Apr 1962

Media Count:

64 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604371

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROBLEMS OF SUPPORT PLANNING,

Personal Author(s):

STEGER,Wilbur A

Report Date:

Apr 1962

Media Count:

14 Page(s)

Report Number(s):

P-2574

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses what systems analysis, management science, or operational research can do to improve their contributions to support planning.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605964

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SET-THEORETIC FORMALIZATIONS OF COMPUTATIONAL ALGORITHMS, COMPUTABLE FUNCTIONS,
AND GENERAL-PURPOSE COMPUTERS,

Personal Author(s):

Levien, Roger E

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Number(s):

P-2573

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is concerned with formalization of the notion of computational algorithm, determination of the class of functions computable by such algorithms, and development of a formal definition of 'general-purpose computer'. Functional systems, consisting of a set and a function in that set, were introduced and two definitions according to which they may be considered to compute functions were proposed. It was demonstrated that under the first, and more elementary, definition of the function computed by functional systems, a vanishingly small fraction of all functions, only the class of stable functions, is computable. The existence of single functional systems which can compute every function in a given set was demonstrated.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0292752

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME QUESTIONS CONCERNING DIFFERENCE APPROXIMATIONS TO PARTIAL DIFFERENTIAL EQUATIONS

Personal Author(s):

BELLMAN,RICHARD

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0279936

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A DISCUSSION OF UNCERTAINTY IN COST ANALYSIS /A LECTURE FOR THE AFSC COST ANALYSIS COURSE

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Number(s):

RM-3071-PR

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0276531

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CUMULATIVE PROBABILITY OF DETECTION FOR TARGETS APPROACHING A UNIFORMLY SCANNING SEARCH RADAR

Personal Author(s):

MALLETT,J D

BRENNAN,L E

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The cumulative detection probability of a search radar is discussed when it is scanning uniformly. This is the probability that a target approaching the radar at a constant radial velocity is detected at least once by the time it reaches a given range, as distinguished from the more common blip-scan ratio (a single-scan detection probability). It is shown that for constant-velocity targets the range for a given cumulative detection probability varies as the cube root of the power-aperture product, rather than as the fourth root. Curves of cumulative detection probability as a function of normalized range are given for three different target scintillation models. Also, curves of optimum (normalized) frame time are given as a function of the desired cumulative detection probability for each of the three target scintillation characteristics. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0609758

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MULTIPLE EQUATION MODEL OF HOUSEHOLD LOCATIONAL AND TRIPMAKING BEHAVIOR,

Personal Author(s):

Kain,J F

Report Date:

Apr 1962

Media Count:

74 Page(s)

Report Number(s):

RM-3086-FF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Memorandum describes a multiple equation model of household locational and tripmaking behavior, to be used in RAND's study of urban transportation. The model presented here is a multiple equation recursive model, estimated by applying least squares multiple regression techniques to cross-sectional data obtained from the Detroit Area Traffic Study's home-interview origin and destination study. The worktrips of more than 40,000 sampled workers were aggregated to 254 spatially separate workplace zones. The model explains four types of locational and tripmaking behavior for the white workers employed in these 254 zones: residential space consumption, automobile ownership, modal choice, and length of journey-to-work. In all, the final model has seven statistical and two definitional equations. The dependent variables for these nine equations include four measures for residential space consumption, one for auto ownership, three for mode choice, and one for length of journey-towork.

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0275313

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MODEL FOR SATELLITE ELECTRIC DRAG CALCULATIONS

Personal Author(s):

MODESITT,G E

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The charge on a satellite is likely to be so great that electric drag calculations based on the usual linear theories of charged particle energy losses will not be valid. The classical energy loss theory is discussed and the inadequacy of the linear approximation is demonstrated. From a phenomenological model for the medium a generalized Debye length is calculated and used as the cut-off parameter for Coulomb scattering. The results are applied to the West Ford needles and show a linear dependence of drag on needle potential. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0275312

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLYNOMIAL APPROXIMATION. A NEW COMPUTATIONAL TECHNIQUE IN DYNAMIC PROGRAMMING. I. ALLOCATION PROCESSES

Personal Author(s):

BELLMAN,RICHARD

KALABA,ROBERT

KOTKIN,BELLA

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The application of the simple yet powerful computational technique of polynomial approximation to problems in dynamic programming is initiated. The theoretical applicability of orthogonal polynomials is discussed and then applied to one and two-dimensional allocation problems. Numerical results obtained from FORTRAN programs involving Legendre polynomials are presented. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0273842

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/273842.pdf

Size: 654 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD273842>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE ANALYTIC SIGNAL REPRESENTATION OF MODULATED WAVEFORMS

Descriptive Note:

Memorandum rept.

Personal Author(s):

Bedrosian, Edward

Report Date:

Mar 1962

Media Count:

28 Page(s)

Report Number(s):

RAND/RM-3080-PR

XC-USAF

Contract Number:

AF49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A general and mathematically convenient formulation of analog- modulated signals which makes use of the analytic signal concept is presented. Known types of modulation are readily identified as special cases. As a result of examining the various cases which the model embraces, a new type of modulation has been discovered--single sideband frequency modulation (SSB FM)-- which can be derived from a conventional phasemodulated signal by an additional amplitude modulation, using the exponential function of the modulating signal's Hilbert transform. The resulting modulated signal will have a onesided spectrum about the carrier frequency, will be compatible with existing FM receivers, and will cause a decrease in signal bandwidth.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0273516

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESSENTIAL FACTORS OF THUNDERSTORM FORECASTING

Personal Author(s):

SARTOR,J D

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method for formulating a mathematical relationship between the occurrence of thunderstorms and several essential prior conditions is demonstrated. A winnowing of 24 thunderstorm-forecasting parameters led to the isolation of five essential factors and an expression demonstrating their possible relationship to thunderstorms. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0279556

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DATA DESCRIPTION FOR DETAB-X /DECISION TABLE, EXPERIMENTAL/

Report Date:

Mar 1962

Media Count:

43 Page(s)

Report Number(s):

RM-3010-PR

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274181

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/274181.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD274181>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) WIDTHS AND HEIGHTS OF $(0, 1)$ -MATRICES

Descriptive Note:

Memorandum RM-2896-PR

Personal Author(s):

FULKERSON, D R

RYSER, H J

Report Date:

Mar 1962

Media Count:

41 Page(s)

Report Number(s):

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Let A be an m by n $(0, 1)$ -matrix, and suppose that E^* is an m by ϵ submatrix of A having the property that each row of E^* contains at least α 1's. The ϵ columns of E^* are said to form an α -set of representatives for A . Let $\epsilon(\alpha)$ be the minimal number of columns of A that form an α -set of representatives. The integer $\epsilon(\alpha)$ is called the α -width of A . If A has α -width $\epsilon(\alpha)$, select an m by $\epsilon(\alpha)$ submatrix E^* of A having the property that the

number $\delta(\alpha)$ of rows of E^* containing exactly α 1's is as small as possible. The integer $\delta(\alpha)$ is called the α -height of A .

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274035

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/274035.pdf

Size: 4 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD274035>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) HUMAN FACTORS IN AUTOMATIC CHECKOUT EQUIPMENT: AN ANNOTATED BIBLIOGRAPHY

Report Date:

Mar 1962

Media Count:

92 Page(s)

Report Number(s):

XC-DCSRTAF-DDP

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A simple five-category system was used in organizing the documents. The five subject areas are: (1) general philosophy and review of automatic checkout methods, (2) maintainability directives and guides, (3) models of the maintenance process, (4) human performance of checkout and fault-isolation tasks, and (5) specific checkout systems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274182

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/274182.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD274182>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A CHARGE-SEPARATION MECHANISM FOR THE PRODUCTION OF POLAR AURORAS AND ELECTROJETS

Personal Author(s):

KERN, J W

Report Date:

Mar 1962

Media Count:

52 Page(s)

Report Number(s):

XG-NASA

Monitor Series:

NASA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A mechanism for charge separation in the geomagnetically trapped radiation is described which may account for some observed phenomena associated with the polar aurora and the electrojet current systems. Surfaces of constant number density may be separated from surfaces of constant integral invariant within the trapped radiation as a result of distortion of the geomagnetic field by solar streams. Drift separation of protons and electrons will follow, and for irregular distributions of plasma number density, electric fields will arise. A direct consequence of such polarization of the geomagnetically

trapped radiation will be the polar-electrojet current systems. The polar aurora arise where energetic particles are discharged from regions of excess charge within the geomagneticall trapped radiation. A model for the discharge of such auroral particles is discussed. An interesting feature of the proposed mechanism is that the extreme thinness of auroral sheets appears to follow as a natural consequence of charge separation. This is shown analytically for a simple two-dimensional model of a trapped plasma.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0634332

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DATA PROCESSING SYSTEM FOR STATE AND LOCAL GOVERNMENTS,

Personal Author(s):

Hearle, Edward F R

Report Date:

Mar 1962

Media Count:

15 Page(s)

Report Number(s):

P-2557

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

20 - JOURNAL ARTICLES; DTIC USERS ONLY

Distribution Statement:

Availability: University of California Press, Los Angeles, Calif., \$1.00.

Abstract:

(U) Most users of electronic data processing (EDP) equipment have concentrated on automation of well-defined clerical operations such as utility billing, payroll preparation, financial accounting, and driver licensing. This paper describes an approach to data systems for state and local governments that looks beyond mechanization of present procedures to the development of fresh concepts of information handling through the use of EDP technology.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607362

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS. CHAPTER 19. GAME PLAYING,

Personal Author(s):

Gruenberger,F J

McCracken,D D

Report Date:

Mar 1962

Media Count:

12 Page(s)

Report Number(s):

P-2559

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The application of computers to game playing is introduced, with emphasis on the games of Nim and Oware. It's relationship to solving problems; how to simulate the decision processes that humans exercise in problem situations is considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0284427

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE TERMS OF SOVIET-SATELLITE TRADE: 1955-1959,
Personal Author(s):
MENDERSHAUSEN,HORST
Report Date:
Mar 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0607358
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) DESIGN PRINCIPLES FOR AN INTELLIGENT MACHINE,
Personal Author(s):
Maron,M E
Report Date:
Mar 1962
Media Count:
8 Page(s)
Report Number(s):
P-2572
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:
(U) This paper discussed the role of prediction as the key process underlying the function of an intelligent machine. A model of a 'neuron' was presented which exhibits properties of memory and

learning. The formalism of the calculus of probability allows one to interpret the behavior of a neuron in such a way as to justify how a network of such elements can be organized so that it can learn to predict.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0273329

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME METHODS FOR ESTABLISHING INTERPLANETARY TRANSFER ORBITS

Personal Author(s):

ROWELL,L N

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some methods for establishing heliocentric interplanetary transfer orbits are discussed. The four basic methods and their variations can be used to establish orbits having specified transfer angles, transfer times, hyperbolic excess velocities, or heliocentric departure velocities. Each method consists of a step-by-step computation procedure which utilizes the equations of two-body motion and appropriate trigonometric relations to establish the desired transfer orbit. Each method for establishing a desired transfer orbit requires an iterative process. Thus, the methods are best applied by using a large-scale digital computer. In this way numerous orbits can be established and the orbit which is optimum for some requirement can be selected. None of the methods permits a direct analytical determination of an optimum orbit. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0294118

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POISSON SUMMATION FORMULAS FOR GROUPS-1: FINITE GROUPS

Personal Author(s):

BELLMAN,RICHARD

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A summation formula for finite groups is established analogous in form and proof to the classical Poisson summation formula. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0612427

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME COMPARISONS BETWEEN THE RUSSIAN AND CHINESE 'MODELS',

Personal Author(s):

ZAGORIA,Donald S

Report Date:

Mar 1962

Media Count:

41 Page(s)

Report Number(s):

P-2561

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Russians and Chinese have disagreed on whether or not the Chinese road to communism is more relevant than the Russian for underdeveloped areas. This disagreement seems to be intimately bound up with a struggle for power and spheres of influence in Asia and other underdeveloped areas. The Soviet model has proved to have important weaknesses when applied to China, an underdeveloped Asian country. It is by no means obvious that the Chinese communists have as yet discovered a more suitable model for themselves. Of the factors which help account for differences in Russian and Chinese roads to socialism, the most important would seem to be the great difference in population-resource ratios; the fact that the Chinese could benefit from Soviet mistakes and from Soviet help; the fact that they had the benefit of twenty or more years of regional power; the considerable differences in the manner in which the two parties acquired and in China before the seizure of power; and, the fact that the two countries are at differing stages of socio-economic development. (Prepared for presentation at a meeting of the Assn for Asian Studies, Boston, April 2-5, 1962).

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0273155

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COLLISION DAMPING OF PLASMA OSCILLATIONS

Personal Author(s):

DUBOIS,D F

GILINSKY,V

KIVELSON,M G

Report Date:

Mar 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0610830
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) PLANNED REPLACEMENT,
Personal Author(s):
Kamins,Milton
Report Date:
Mar 1962
Media Count:
24 Page(s)
Report Number(s):
P-2563
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some of the characteristics of planned replacement and the factors determining when and how it should be used for best results are discussed. The report establishes the conditions that must prevail before planned replacement is worthwhile, shows how likely they are to occur in practice, and explains how to quantify them. It then describes a sort of all-purpose goal that should allow the user to employ a single method to get just the emphasis he wants -- on reliability, cost, system effectiveness, or a mixture of the three. Finally, it describes some of the difficulties the user may encounter.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604677

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TECHNOLOGICAL CHANGE AND LOCAL ECONOMY,

Personal Author(s):

Novick,D

Report Date:

Mar 1962

Media Count:

24 Page(s)

Report Number(s):

P-2568

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses the changes brought about in various industries, particularly the aircraft and space industries, with the coming of the nuclear age.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606691

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PHYSICOCHEMICAL CHARACTERISTICS OF PLACENTAL TRANSFER,

Personal Author(s):

DeHaven,J C

DeLand,E C

Assali,N S

Manson,W

Report Date:

Mar 1962

Media Count:

34 Page(s)

Report Number(s):

P-2565

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A biophysicochemical model of certain maternal-fetal circulatory and metabolic relations was constructed for the purpose of a rigorous extra-uterine study of the transfer of respiratory gases and other elements across the placental membrane. The model was subsequently analyzed by a mathematical method for the minimization of a chemical free-energy function subject to constraints relating to mass, charge and phase transfer. As a preliminary investigation of the placental phenomenon, the model was applied to the representation of the exchanges of respiratory gases occurring between the venous and arterial sides of the total air-blood system. The model indicates a greater acidity for the fetal than for the maternal erythrocyte intracellular medium. This feature, combined with other aspects of the results, could explain the lower oxygen saturation of fetal hemoglobin in utero, and also suggests that the fetal oxygen environment is not so inimical or stressful to the fetus as previously hypothesized. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606196

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TESTS OF HOMOGENEITY FOR CORRELATED SAMPLES,

Personal Author(s):

Madansky,Albert

Report Date:

Mar 1962

Media Count:

22 Page(s)

Report Number(s):

P-2325

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents techniques for testing various hypotheses related to the notion of temporal homogeneity of a population each of whose members can belong to any one of S states at any time. These hypotheses include Cochran's permutability hypothesis, the hypothesis of strict exchange, the usual homogeneity hypothesis for multinomial distributions in the presence of correlated samples, and the hypothesis that a first order Markov chain is in a steady state. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274989

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE SYNTHESIS OF RELIABLE SWITCHING ELEMENTS

Personal Author(s):

BERNSTEIN,A J

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0274836
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) MULTIPLICITIES AND MINIMAL WIDTHS FOR (0,1)-MATRICES
Personal Author(s):
FULKERSON,D R
RYSER,H J
Report Date:
Mar 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:
(U) The present analysis continues the study of alpha-width of a (0,1)-matrix. The principal new result is a simple construction that produces a matrix having the property that its alphawidths are minimal for all alphas. (Author)
Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0606690
Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/606690.pdf

Size: 922 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD606690>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SOVIET CIVIL DEFENSE PROGRAM

Personal Author(s):

Goure, Leon

Report Date:

Mar 1962

Media Count:

24 Page(s)

Report Number(s):

P-2554

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) Soviet civil defense is the subject of public discussion in the United States with a great deal of conflicting information being published about it. Following the late President Kennedy's announcement of plans to accelerate and expand the United States civil defense and shelter construction program, the Soviet Union has done its best to cast doubts on the value of the U. S. effort as well as to deny the existence of a similar civil defense program in the Soviet Union.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606689

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE JAPANESE COMMUNISTS AND THEIR STRUGGLE FOR POWER,

Personal Author(s):

Langer,Paul F

Report Date:

Mar 1962

Media Count:

42 Page(s)

Report Number(s):

P-2571

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606688

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Economic-Physical Trade-Offs in Scheduling Missile System Checkouts,

Personal Author(s):

KAAAMINS,M

Report Date:

Mar 1962

Media Count:

26 Page(s)

Report Number(s):

P-2567

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper is concerned with a portion of RAND's study of automatic checkout equipment, which was initiated late in 1958 at the request of the Air Force. The project objective was . . . to establish the basic philosophy, concepts, and parameters for application of automatic test and checkout equipment to improve the operational readiness and employment of weapon systems. The primary activity then was to develop concepts, design methods and techniques, and decision aids to help make these test equipments and systems more effective--in short, to help make the best use of test equipment dollars to get the best weapon system performance.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274267

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/274267.pdf

Size: 716 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD274267>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CAUSE OF THE PRELIMINARY REVERSE IMPULSE OF STORMS

Personal Author(s):

VESTINE, E H

KERN, J W

Report Date:

Mar 1962

Media Count:

31 Page(s)

Report Number(s):

XG-NASA

Monitor Series:

NASA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Preliminary reverse impulse, solar wind. Two equivalent ionospheric-current systems, derive for magnetic disturbances associated with the on set of geomagnetic storms, are examined. The first current system is that given by Nagata and Abe (1955) for preliminary reverse in pulse at 6h 25m GMT, May 29, 1933. The second current system is for the polar part of the averaged sudden commencement (SC) as given by Jacobs and Obayashi (1956). Electric-charge distributions which would drive these current systems are derived from potential analyses. Finally, the interaction between an approaching solar stream an the magnetosphere is discussed. It is shown that a simple extension of the Chapman Ferraro theory can provide the served polar charge distributions.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274597

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXPECTED CRITICAL PATH LENGTHS IN PERT NETWORKS

Personal Author(s):

FULKERSON,D R

Report Date:

Mar 1962

Media Count:

19 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release: Distribution unlimited. Availability: Document partially illegible.

Abstract:

(U) A feasible computational method that seems to yield a fairly good approximation to the expected duration time of a project whose individual job times are random variable is described. Another possible area of application of this method would be to communication net orks whose components are subject to random delay times. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274339

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WIDTH SEQUENCES FOR SPECIAL CLASSES OF (0,1)-MATRICES

Personal Author(s):

FULKERSON,D R

RYSER,H J

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The study of alpha-widths of (0, 1)-matrices (AD-274 181) continued, the emphasis being on those special classes of b by v (0, 1)-matrices having k 1's per row and 4 1's per column. It is assumed throughout that the class parameters b, v, k, r satisfy the inequality $(b-r)(v-k-1)$ less than or equal to $v - 1$. Such a class has special combinatorial interest. For example, complements of finite projective planes and of Steiner triple systems have parameters satisfying this inequality. Several theorems are proved concerning the width sequence for a matrix in such a class. Insofar as possible, these results are used to obtain information concerning the maximal width sequence for the class. Perhaps the major general result established is that jumps in the width sequence for a matrix in the class, or in the maximal width sequence for the class, are either 1 or 2. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606693

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS, CHAPTER 16, GENNERATORRS,

Personal Author(s):

Gruenberger,F J

McCracken,D D

Report Date:

Mar 1962

Media Count:

18 Page(s)

Report Number(s):

P-2560

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The generator, a device which can be designed to create computer instructions or routines and execute them, is introduced. Characteristics of magnetic tape as a storage device for these instructions are discussed and a sample problem is presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274598

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A MECHANICAL INTERPRETATION OF THE NULL GEO-DESICS IN STATIC EINSTEIN-RIEMANN SPACES

Personal Author(s):

THOMAS,T Y

EDELEN,D G B

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Normal trajectories are applied to any moving, two-dimensional surface which carries a mechanical disturbance through a material body which are projections into that body of light rays in an Einstein-Riemann space whose local velocity of light is equal to the normal velocity of the surface through the material body at corresponding points. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0279597

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NEW OASD /COMPTROLLER/ PROGRAMMING/BUDGETING PROCESS /A LECTURE FOR THE AFSC COST ANALYSIS COURSE

Report Date:

Mar 1962

Media Count:

16 Page(s)

Report Number(s):

RM-3048-PR

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA956119

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) On the Maximum Transform and Semigroups of Transformations.

Descriptive Note:

Memorandum rept.,

Personal Author(s):

Bellman, Richard

Karush, William

Report Date:

Mar 1962

Media Count:

9 Page(s)

Report Number(s):

RAND/RM-3056-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Part of the Project RAND research program consists of basic supporting studies in mathematics. A problem frequently occurring in applications is that of determining the maximum or minimum value of a function subject to prescribed constraints. In the present Memorandum the authors show how the mathematical technique of the maximum transform can often be applied effectively to this problem.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA081363

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Rules for Planned Replacement of Aircraft and Missile Parts.

Descriptive Note:

Memorandum rept.,

Personal Author(s):

Kamins,M

Report Date:

Mar 1962

Media Count:

30 Page(s)

Report Number(s):

RAND/RM-2810-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The appropriate replacement policy for a part depends on its failure characteristics and the relative costs of an in-service failure and of a planned replacement (replacement before failure). For planned replacement to be worthwhile, the part must display a wearout characteristic (a failure rate increasing with time); and the cost of an in-service failure must be greater than the cost of a planned replacement. Failure-data analysis has shown that many aircraft and missile parts fail exponentially; that is, they have a constant failure rate. In these cases, a new part is no better than a used but serviceable part of any age. The optimum replacement policy for these parts -- optimum in the sense of minimizing expected cost per unit time -- is a simple one: Never plan to replace before failure, regardless of how expensive or inconvenient an in-service failure becomes. On the other hand, analysis of failure data has also uncovered many parts with non-exponential failure characteristics. Substantial numbers of these parts exhibit an increasing failure rate over time. In this situation the age at which the part should be replaced

depends on the relative cost of an in-service failure. In general, for a given aging effect, the higher the relative cost of an in-service failure, the shorter should be the planned-replacement interval. Similarly, for a given in-service failure cost, the more severe the aging effect the shorter the replacement interval.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0634197

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VARIATIONAL PROBLEMS WITH INEQUALITY CONSTRAINTS.

Descriptive Note:

Revised ed.

Personal Author(s):

Dreyfus, Stuart

Report Date:

26 Feb 1962

Media Count:

20 Page(s)

Report Number(s):

P-2357

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604457

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DATA PROCESSING FOR CITIES,

Personal Author(s):

HEARLE,Edward F R

Mason,Raymond J

Report Date:

Feb 1962

Media Count:

51 Page(s)

Report Number(s):

P-2492

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The advancing technology of data processing for cities is discussed. This technology offers benefits of two kinds. First, it enables cities to improve the efficiency of routine data processing activities; and second, data processing technology enables cities to improve the performance of their basic functions.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604671

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS. CHAPTER 11. INTERPRETIVE ROUTINES,

Personal Author(s):

Gruenberger,F J

McCracken,D D

Report Date:

Feb 1962

Media Count:

27 Page(s)

Report Number(s):

P-2529

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The use of an interpretive coding scheme in the mechanical handling of a group of subroutines involving simple arithmetic operations are examined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606415

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE OPTIMALITY OF SEQUENTIAL PROBABILITY RATIO TESTS,

Personal Author(s):

Matthes, Theodore K

Report Date:

Feb 1962

Media Count:

7 Page(s)

Report Number(s):

P-2541

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The sequential probability ratio test for testing a simple hypothesis H_{sub0} against a single alternative H_{sub1} was first proved to be optimal by Wald and Wolfowitz in a sense there defined. A much simpler proof has been given by L. LeCam and appears in Lehmann's book. In the present note a proof of this optimality is given which relies primarily on a simple mapping theorem. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606411

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS: APPENDIX 2: DIVISION,

Personal Author(s):

Gruenberger ,F J

McCracken,D D

Report Date:

Feb 1962

Media Count:

10 Page(s)

Report Number(s):

P-2530

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The construction and operation of a computer subroutine for the purpose of division is presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607673

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME INVESTMENT CRITERIA FOR UNDERDEVELOPED AREAS,

Personal Author(s):

Averch,Harvey

Report Date:

Feb 1962

Media Count:

32 Page(s)

Report Number(s):

P-2540

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The controversy existing in a growing economy with respect to alternative welfare criteria or targets is discussed. For example, in an economy with minimal current living standards (leaving aside problems of definition and measurement), is it better to raise current consumption and neglect any consequences for future income flow, or is it better to forego present consumption in favor of future income. Or, if an economy contains several sectors, what are optimal strategies of resource allocation with respect to present and future income. Clearly, deciding such questions implies the need for a social welfare function or a set of social welfare functions which contain the usual innate logical difficulties. Mathematical models are presented in support of this theory.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0278470

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SAMPLING INSPECTION PROBLEM IN ARMS CONTROL AGREEMENTS: A GAME-THEORETIC ANALYSIS

Personal Author(s):

DRESHER,MELVIN

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Many disarmament or arms-control agreements may be monitored by sample inspections. Unlike the usual sampling procedures, sampling for armscontrol agreements must take into account the possibility that the statistical universe from which samples are to be drawn may be tampered with so as to decrease the probability of detection of a violation. A game-theoretic model is formulated for studying a sampling problem in which the inspector is allowed to examine a fixed number (usually small) of items or natural events (e.g., items from an assembly line under an agreement limiting military production, or seismic events under a nuclear test-ban agreement). It is assumed that the inspections are to be performed within a fixed time period or on a series of events of fixed length. Optimal sampling procedures are derived as functions of the number of inspections and the size of the statistical universe. Some variations on the model are briefly considered. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604360

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON A CONFERENCE WITH SOVIET SCIENTISTS,

Personal Author(s):

DeWeerd,H A

Horelick,A L

Leites,N

Report Date:

Feb 1962

Media Count:

34 Page(s)

Report Number(s):

P-2542

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604452

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WESTERN ELECTRONIC SHOW AND CONVENTION (WESCON), SAN FRANCISCO, CALIFORNIA, 1961,

Personal Author(s):

Hatch, Marian M

Report Date:

Feb 1962

Media Count:

41 Page(s)

Report Number(s):

P-2522

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The more than 35,000 engineers attending the Western Electronic Show and Convention found special emphasis in the field of radio astronomy. WESCON was held August 2225, 1961, under the joint sponsorship of the 7th Region of the IRE (Institute of Radio Engineers) and WEMA (Western Electronic Manufacturers Association). The technical program had 42 diversified subject sessions, which included a total of almost 120 papers in the field. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604458

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPLEMENTARY PROBLEM ON NONPLANAR GRAPHS,

Personal Author(s):

Harary, Frank

Report Date:

Feb 1962

Media Count:

7 Page(s)

Report Number(s):

P-2534

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It has been found empirically by John L. Selfridge, in work with networks to be used as printed circuits, that for every network with nine nodes which was encountered, either it or its complementary network could not be printed with no intersecting arcs. In terms of graph theory this conjecture asserts that for every graph G with $p = 9$ points, either G or its complementary graph G is nonplanar. If this conjecture holds for graphs with 9 points, it clearly also holds for graphs with $p > 9$ points. It was remarked in the problem that a simple argument using Euler's polyhedron formula readily demonstrates the conjecture for all graphs having $p \geq 11$ points. The purpose of this miscellaneous note is to supply that argument.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604456

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MAXIMUM CONNECTIVITY OF A GRAPH,

Personal Author(s):

Harary, Frank

Report Date:

Feb 1962

Media Count:

15 Page(s)

Report Number(s):

P-2531

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper solves the problem of the maximum connectivity of any graph with a given number of points and lines. In addition, the minimum connectivity. The maximum diameter, and the minimum diameter are obtained. Two unsolved problems concerning the distribution of the values of the connectivity and the diameter are included.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0609084

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE LABOUR PARTY AND UNILATERALISM,

Personal Author(s):

De Weerd, H A

Report Date:

Feb 1962

Media Count:

24 Page(s)

Report Number(s):

RM-2914-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The period 1960-1961 may have decided the British Labour Party's relationship to unilateralism. Until recently it seemed that the party was on the verge of either being captured by the Campaign for Nuclear Disarmament (CND) or torn apart by violent internal conflicts over nuclear weapons. By autumn of 1961, however, it was clear that the nuclear disarmers had lost their initial chance of transforming a private protest movement into a significant political force. With an intensive program of grass-roots education and party discipline, Labor leaders have reversed the trend toward unilateralism and have restored some semblance of unity and a sense of purpose to their party. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606417

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE OUTPUT PROBABILITY DENSITY FUNCTION OF A LAMINAR DEVICE WITH CERTAIN NON-GAUSSIAN RANDOM INPUTS,

Personal Author(s):

Northrop,G M

Report Date:

Feb 1962

Media Count:

66 Page(s)

Report Number(s):

P-2536

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The classical problem of determining the output probability density function (p.d.f.) of a zero-memory, oneto-one nonlinear device followed by a linear filter is treated. When the input random process is stationary, gaussian, and 1st-order Markoff, the output p.d.f. is shown to be the solution to a certain Fokker-Planck Forward Diffusion Equation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0328476

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME CONSIDERATIONS OF THE EFFECTS OF AGREEMENTS TO LIMIT ROCKET LAUNCHINGS

Personal Author(s):

DADANT, P M

Report Date:

Feb 1962

Media Count:

77 Page(s)

Report Number(s):

RM-3020

Contract Number:

SD-79

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some consequences implied by agreements to ban either all large rocket launchings or all large military rocket launchings are discussed. A brief review of the prospects for monitoring such agreements, and a snapshot of rocket programs and plans to indicate the variety of activities that would be affected by such bans are presented. The effects on guidance accuracy, size and type of payloads, and operational confidence in military systems are discussed. The study also examines resulting effects

on offensive, defensive, and warning systems, how such bans might influence the risks of surprise attack and accidental war, and their effect on peaceful space activities. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0272429

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ERROR BURST CHAINS IN DATA TRANSMISSION

Personal Author(s):

MERTZ,PIERRE

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0272144

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLUTION OF A SIMPLE OVERHAUL PROBLEM

Personal Author(s):

MCCALL,J J

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method is developed for solving a simple overhaul problem. The system is composed of two subsystems, one of which fails randomly (constant conditional probability of failure) while the other fails according to an aging distribution (increasing conditional probability of failure). Both subsystems are inspected periodically. The system is automatically returned to the depot whenever a failure of either subsystem is detected. Given a failure, a method is presented for determining the replacement and repair actions which should constitute an overhaul. The method also indicates the age at which an unfailed system should be overhauled. The method is designed to maximize system effectiveness, where effectiveness is the ratio of expected good time during a cycle to the imputed cycle length. The imputed cycle length explicitly measures both the downtime and financial costs of the various overhaul actions.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0272143

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE APPROXIMATION OF CURVES BY LINE SEGMENTS USING DYNAMIC PROGRAMMING. II

Personal Author(s):

BELLMAN,RICHARD

KOTKIN,BELLA

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The technique of dynamic programming is applied to approximate a given continuous function $g(x)$ by a finite number of line segments over the interval a, b . The problem is to determine the constants $a_{sub k}$, $b_{sub k}$, k equals $0, \dots, N - 1$ and the points of division $u_{sub 1}, \dots, u_{sub N-1}$ in the interval a, b that minimize the function $J = \sum_{k=0}^{N-1} \int_{u_k}^{u_{k+1}} (g(x) - a_{sub k} - b_{sub k} x)^2 dx$. Results are calculated for g equals e^{-x} by means of a FORTRAN program for the IBM-7090. An analytic treatment is given of the functions $g(x)$ equals x^2 and $g(x)$ equals $1/e^{cx}$ power that is easily derived by utilizing the functional equation technique of dynamic programming. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0272894

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MECHANISMS UNDERLYING PREDICTIVE BEHAVIOR FOR AN INTELLIGENT MACHINE

Personal Author(s):

MARON, M E

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0272145

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DIFFERENTIAL GAME WITHOUT PURE STRATEGY SOLUTIONS ON AN OPEN SET

Personal Author(s):

BERKOVITZ,LEONARD D

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An example is given of a differential game with integral payoff and continuous terminal payoff that does not have a pure strategy solution. The methods and results of a previous approach (A Variational Approach to Differential Games, Rand Corp., Memorandum RM-2772, 1961) are used to establish the nonexistence of pure strategies. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0272559

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPUTATIONAL PROCEDURE FOR OPTIMIZING INTERPLANETARY TRAJECTORIES

Personal Author(s):

HO,Y C

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An analysis that describes a computational procedure for optimizing dynamical system trajectories by a method of successive approximations is presented. The procedure may be applied to a large class of control problems which are described by nonlinear differential equations. The performance criterion minimized by the process is the weighted sum of the squares of the terminal errors in the system state variables, subject to certain constraints on the control variables. The method is applied to the optimization of a low-thrust trajectory from earth to Mars. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0272847

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RECENT SOVIET ADVANCES IN AEROSPACE TECHNOLOGY

Personal Author(s):

KRIEGER,F J

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) IDENTIFIERS: LUNIK, SPUTNIK. THE Soviet aerospace program has been developing in three well-defined, although interrelated, phases--the earth-orbit, the lunar, and the interplanetary--with corresponding increase in technological complexity. All phases herald a eventual manned interplanetary travel. The current earth-orbital, or man-in-space, program, having received the greatest emphasis, has

performance been the most successful. In the interest of economy and expediency, there is a trend in the Soviet Union toward the development of more powerful propulsion systems for launching space vehicles than heretofore used by combining rocket motors with special purpose turbojet and ramjet engines. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0272138

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHEN TO STOP SAMPLING AND INITIATE PRODUCT IMPROVEMENT

Personal Author(s):

MCCALL, J J

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The relation between information collection and product improvement is considered. A rule is developed whereby the decision maker can determine when to stop gathering information and initiate product improvement. A simple technique is used for ranking product improvement candidates (subsystems). The ranking depends on (1) the subsystem's failure rate, (2) the number of subsystems of this type in the weapon system, (3) the cost in weapon system downtime of a subsystem failure, (4) the maintenance cost of a subsystem failure, (5) the initial cost of the weapon system and (6) the weapon system's expected service life. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0271947

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/271947.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD271947>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LIGHT SCATTERING ON PARTIALLY ABSORBING HOMOGENEOUS SPHERES OF FINITE SIZE

Personal Author(s):

DEIRMENDJIAN, D

CLASEN, R J

Report Date:

Feb 1962

Media Count:

50 Page(s)

Report Number(s):

R-393-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A discussion is presented of the quantitative results based on the exact solution of the following theoretical problem: For a sphere of arbitrary size, composed of homogeneous material with a finite dielectric constant and conductivity, receiving a constant flux of energy from a single direction in the form of plane electromagnetic waves of a given frequency and state of polarization, find the total amount of energy absorbed and scattered by the sphere, as well as the specific intensity and the state of polarization of the energy scattered in a given direction, at a large distance from the sphere. A complete analytical solution to this problem was obtained by Gustav Mie on the basis of Maxwellian field theory.

The present study gives accurate numerical results, based on Mie's expressions, for a wide range of basic parameters not treated earlier. Illustrated and discussed by means of selected examples are the effects of variations in dielectric and conducting properties on the total scattering and absorption cross sections as a function of the relative size of the sphere, as well as on the differential amplitude, intensity, and polarization of the scattered energy.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0274684

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPROXIMATE BAND-PASS LIMITER ENVELOPE DISTRIBUTIONS

Personal Author(s):

DOYLE,WORTHIE

REED,IRVING S

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An approximate distribution is computed for the envelope of sine wave plus noise after passage through a wide-band filter, limiter and narrowband filter. As the input bandwidth to the limiter increases, it is shown that the output envelope distribution converges to the usual sine wave in noise envelope distribution, without limiting, but with a definite 1.4 db loss. First-order correction terms are supplied which make it possible to compute first-order statistics for the output envelope when the output signal-to-noise ratio is on the order of one. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0291605

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COST OF ADVANCED WEAPONS

Personal Author(s):

NOVICK,DAVID

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A generalized discussion of the cost of advanced weapons is presented. Cost factors, such as those incurred in research, development, test evaluation, production wages and material prices are considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606872

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STATISTICAL APPROACH TO SIMULATION,

Personal Author(s):

Geisler,Murray A

Report Date:
Feb 1962
Media Count:
8 Page(s)
Report Number(s):
P-2543
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
ADA081365
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) Managing Shop Workloads.
Descriptive Note:
Memorandum rept.,
Personal Author(s):
Smith,T C
Report Date:
Feb 1962
Media Count:
31 Page(s)
Report Number(s):
RAND/RM-3003-PR
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:

(U) Air Force emphasis on base self-sufficiency makes the control of baseshop workloads an important responsibility of maintenance management. Air Force Manual 66-1, Organizational and Field

Maintenance, assigns this responsibility to workload control in the maintenance control complex and the field maintenance activity on each base. The purpose of this Memorandum is to suggest a system based on AFM 66-1 philosophy which should help Oxnard Air Force Base fill in some of these details. The Memorandum outlines procedures for summarizing, monitoring, and controlling the flow of work through all base repair shops or work centers so as to maximize shop support of both mission-oriented requirements and the base master-repair program.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0459444

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MILITARY SYSTEMS COST ANALYSIS (A SUMMARY LECTURE FOR THE AFSC COST ANALYSIS COURSE),

Personal Author(s):

Fisher, G H

Report Date:

31 Jan 1962

Media Count:

22 Page(s)

Report Number(s):

RM-2975-PR

Contract Number:

AF19 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this memorandum, cost analysis refers to the determination of the probable economic resource impact of future Air Force weapon and support systems. Five major aspects of cost analysis are stressed: understanding the problem or context in which the cost estimates are to be used, assembling the basic data, deriving costestimating relationships, using these relationships to make an estimate, and presenting the results. Both hardware and non-hardware system cost components are discussed, and

the sensitivity of total system cost to variations in the cost and characteristics of these components is considered. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604594

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A POSSIBLE APPROACH TO SCIENTIFIC EXPLORATION OF THE PLANET MARS,

Personal Author(s):

Steinhoff,E A

Report Date:

12 Jan 1962

Media Count:

56 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper deals with some possible objectives of a Mars expedition, operational approaches that promise early feasibility, and their technological foundation. It does not deal with specific solutions optimized for minimum objectives, but with ways to obtain a foothold for a scientific team, and to support it continuously, the aim being to achieve increasing self-sufficiency in the later phases of the establishment of a Mars base.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0411808

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MINIMUM-WEIGHT DESIGN FOR MOVING LOADS,

Personal Author(s):

Gross, Oliver A

Prager, William

Report Date:

Jan 1962

Media Count:

16 Page(s)

Report Number(s):

RM2887PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The main problem considered and solved is the minimum-weight design of a horizontal I-beam of constant web and variable flange thickness. The beam is simply supported at one end and built in at the other and is designed to with stand (in plastic flow) a concentrated vertical load of fixed intensity moving slowly from one end to the other. To introduce the general techniques employed, a few discrete versions of the problem are first presented and solved as linear-programming problems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616404

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GUIDE TO RUSSIAN REFERENCE AND LANGUAGE AIDS: AN ANNOTATED BIBLIOGRAPHY.

Descriptive Note:

Revised ed.,

Personal Author(s):

Neiswender, Rosemary

Report Date:

Jan 1962

Media Count:

83 Page(s)

Report Number(s):

P1837-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The following compilation is offered to librarians, students, translators, and researchers as a practical working bibliography of current Russian reference and linguistic materials. It is the outgrowth of a day-to-day use of these materials in a research library concerned largely with Soviet studies. In view of the increasing significance of Soviet science and technology, the bibliography is confined almost entirely to those areas, and does not attempt to cover the social sciences or humanities. Neither does it attempt to be historically inclusive; instead, entries have been limited as far as possible to publications issued since World War II and still in print. Appended to the bibliography are a brief description of Russian transliteration systems (the Library of Congress system has been used throughout the present work), a selective listing of U.S. and foreign dealers in Russian books and periodicals, a list of abbreviations of Soviet publishing houses, and an author-title index to the citations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0279346

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Cost-Quantity Calculator,

Personal Author(s):

Noah, J W

Smith, R W
Report Date:
Jan 1962
Media Count:
26 Page(s)
Report Number(s):
RM-2786-PR
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0607578
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) QUALITY CONTROL AND RELIABILITY FOR TOTAL WEAPON SYSTEM,
Personal Author(s):
Bean,Eloise E
Steger,Wilbur A
Report Date:
Jan 1962
Media Count:
21 Page(s)
Report Number(s):
P-2521
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:
(U) This paper describes a major facet of a three-year-old RAND Logistics Systems Laboratory study known as LP-II. It is intended for those involved in the quality control of the reliability and overall

performance of a total weapon system, whether they are helping develop the quality control procedures for the system's bits and pieces, or testing large components of the entire weapon system. While not originally intended to be of aid in this area, the study has evoked interest recently from those who are faced with the problem of evaluating each of the Air Force ballistic missile weapon systems -- Atlas, Titan, and Minuteman.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0609753

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE AUTOMOBILE-TODAY AND TOMORROW,

Personal Author(s):

HOFFMAN,George A

Report Date:

Jan 1962

Media Count:

30 Page(s)

Report Number(s):

P-2422

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) No revolutionary changes in automotive design are foreseen just a continuation of the steep-gradient evolution witnessed so far in passenger cars. The selective consumer preference for the automobile vis-a-vis the rail vehicle will continue undiminished into the foreseeable future. Description of future car components shows slight manufacturing cost increases offset by reduced weight and increased efficiency. If present day costs are used and the usual inflationary adjustments for the next 10 or 20 years applied, a reasonable approximation for over-all automotive costs in the 1970's would be presented. There is proportionately little effort to provide a terminal storage facility for these hordes of future automobiles. The consumer indicates a persistent desire only to minimize total travel time and cost, whether on the ground, in the air, or through space.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604533

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON THE NATIONAL ACCOUNTS OF ALGERIA, 1950-59 AND 1964,

Personal Author(s):

Lubell,Harold

Report Date:

Jan 1962

Media Count:

24 Page(s)

Report Number(s):

P-2524

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Figures on most of the national accounts flows for Algeria as published by the French Government are presented. The tables are set out in the framework of the old Ruggles - ICA system of national accounts.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606198

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BRIEF REVIEW OF MASS TRANSFER COOLING,

Personal Author(s):

Hartnett,James P

Report Date:

Jan 1962

Media Count:

11 Page(s)

Report Number(s):

P-2473

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The following cooling methods are discussed: Film cooling; Transpiration cooling; Liquid film cooling; Ablation cooling.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0272828

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NATURE OF RESEARCH GOALS. SOME NECESSARY DEFINITIONS

Personal Author(s):

MESTHENE,E G

MACCLINTOCK,S

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0270232
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) CONCERNING A CERTAIN EFFECT IN THE FIELD OF METEOR AERODYNAMICS
Personal Author(s):
STANIUKOVICH,K P
Report Date:
Jan 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0270639
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ESTIMATES OF CRITICAL DIMENSIONS OF SPHERICAL AND SLAB REACTORS
Personal Author(s):
MULLIKIN,T W
Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) UNDER THE ASSUMPTIONS OF CONSTANT ENERGY OF NEUTRONS AND ISOTROPY OF THE COLLISION-FISSION PROCESS, THE DETERMINATION OF THE CRITICAL MASS OF SPHERICAL AND SLAB REACTORS IS EQUIVALENT TO THE DETERMINATION OF TWO OF THE EIGENVALUES OF A LINEAR INTEGRAL OPERATOR T. In the theory of radiative transfer in homogeneous plane parallel atmospheres with isotropic scattering, this same operator is an important one known as the truncated Hopf operator. The theory also applies to stratified slab and spherical reactors in which the physical properties can change from stratum to stratum. This observation is developed and then applied to reactors with a homogeneous core surrounded by a homogeneous reflector. Numerical results are given for the bare homogeneous reactors. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0270861

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE IRRELEVANCE OF THE GNOME SHOT TO DECOUPLING

Personal Author(s):

LATTER, A

LATTER, R

MCMILLAN, W

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The misconception in the public press is that the unexpectedly large signals from the recent Gnome shot somehow imply that the big hole decoupling factor should be reduced from the original estimate of 300. The Gnome shot--tamped in salt--has no relevance to the decoupling factor which, by definition, relates the seismic signal from a tamped shot in tuff to that from a cavity shot in salt. An explanation is given of how the misconception about Gnome arises. The best estimate of the decoupling factor is still 300. (Auth r)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0270860

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPERATORS COMMUTING WITH TRANSLATION BY ONE. PART II. DIFFERENTIAL OPERATORS WITH PERIODIC COEFFICIENTS

Personal Author(s):

MCGARVEY,D C

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Both differential equations and linear operators are mathematical subjects with many applications to both pure and applied mathematics and mathematical physics. This report extends some of the basic analysis of differential equations to wider classes of equations than could previously be handled. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0270637

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC DEVELOPMENT AND POSTWAR RECUPERATION: A COMPARISON OF INDUSTRIAL PRIORITIES

Personal Author(s):

MASSELL,BENTON F

WOLF,CHARLES JR

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The priority of various industries for economic development in less-developed areas and for economic recuperation in advanced countries in the event of thermonuclear war is compared. Theoretical reasons are discussed for expecting both similarities and differences between industrial priorities in the development and recuperation contexts. A particular measure of industrial priority for economic recuperation is described from earlier work. This measure is then correlated successively with each of three measures of industrial priority for economic development: a measure due to Hirschman based on linkage effects; a measure due to Chenery based on the growth elasticity of different industries with respect to changes in per capita national income; and a measure of priority based on industrial growth under India's Five Year Plan. The three correlations yield different results but suggest, on balance, a weak but positive relationship between priorities in the two contexts. Some possible implications of these results for U.S. policy are briefly discussed. (Author)

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0270126

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE STRUCTURE OF A SHOCK WAVE IN AIR TAKING ACCOUNT OF THE KINETICS OF CHEMICAL REACTIONS

Personal Author(s):

KUZNETSOV,N M

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Applications are cited for the practical use of a formula for solving the problem of temperature distribution and the concentrations of the components of dissociating air in the non-equilibrium region beyond the steep leading edge of a shock wave in rarefied air. The problems of the dissociation of oxygen and nitrogen, the dependence of the temperature in front of the wave on the velocity of the wave, and the density of the gas are analyzed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0270125

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE TITANIUM DECADE

Personal Author(s):

MESTHENE, EMMANUEL G

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Ti development program illustrates inefficiencies inherent in Government-industry contractual arrangements aimed at rapid advances in basic technology. More than half the total cost of the program to the Government was the result of subsidizing the creation of a Ti metal industry. It is argued that such Government programs can be more efficient in the future if they recognize more specifically and are aimed more directly at the technological objective, and if the contracts with industry contain more direct rewards for research and development work AS SUCH (rather than indirect rewards in the form of production orders). The memorandum contains the text of a talk given at the ninth annual Titanium Symposium held in conjunction with the Congress of the American Society of Metals at Detroit, Michigan, in October 1961. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0273726

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/273726.pdf

Size: 837 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD273726>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PERTURBATIONS OF A SYNCHRONOUS SATELLITE DUE TO THE TRIAXIALITY OF THE EARTH

Descriptive Note:

Memorandum

Personal Author(s):

FRICK, R H

GARBER, T B

Report Date:

Jan 1962

Media Count:

40 Page(s)

Report Number(s):

RAND-RM-2996-NASA

XG-NASA

Contract Number:

NAS-R-21

Monitor Series:

NASA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) An investigation was made of the behavior of a synchronous (24-hour) satellite as affected by the triaxiality of the earth. This includes not only the effect of the equatorial bulge but also the ellipticity of the earth's equatorial section. The results indicate that there are only two positions on the equator (123 degrees 9 min. West Longitude and 56 degrees 51 min. East longitude) at which a truly synchronous satellite can exist in a stable condition. To establish a synchronous satellite at any other longitude, station-keeping propulsion of the order of 51 fps for each year of operation would be required. If no station-keeping propulsion is provided, the satellite will execute long period (greater than 1.3 years) oscillations about the closest of the two stable positions mentioned above.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605968

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METEOROLOGICAL ROCKETS STEP UPWARD,

Personal Author(s):

Kellogg, William W

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Number(s):

P-2516

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Summary of a talk given on the occasion of the Joint American Meteorological Society-Rocket Symposium Dinner, El Paso, Texas, December 6, 1961. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606199

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS. CHAPTER 9, SCALING,

Personal Author(s):

Gruenberger, F J

McCracken, D D

Report Date:

Jan 1962

Media Count:

14 Page(s)

Report Number(s):

P-2518

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Scaling, the method of keeping track of decimal points in computer arithmetical operations, is introduced. Locating decimal points by proper instructions is discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606197

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROBABILITY AND THE LIBRARY PROBLEM,

Personal Author(s):

MARON,M E

Report Date:

Jan 1962

Media Count:

22 Page(s)

Report Number(s):

P-2471

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606194

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BRIEF REVIEW OF INVENTORY THEORY,

Personal Author(s):

Geisler,Murray A

Report Date:

Jan 1962

Media Count:

12 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper describes the current status of inventory theory by summarizing the main results that have been obtained in the subject, particularly in the last few years. Deterministic inventory models and probabilistic models are considered, we shall also distinguish and distinctions are made between the one-period and the N-period models. The implications of the result for the user of inventory theory are stressed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606201

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RECOVERY OF THE BENDEGO METEORITE,

Personal Author(s):

Sears,Paul M

Report Date:

Jan 1962

Media Count:

21 Page(s)

Report Number(s):

P-2501

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An account of the recovery and transportation of the Bendego Meteorite from the jungles of Brazil to the National Museum in the U. S.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606329

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FORCES INDUCED BY BREAKING WAVES ON A VERTICAL WALL,

Personal Author(s):

LEENDERTSE,J J

Report Date:

Jan 1962

Media Count:

2 Page(s)

Report Number(s):

P-2512

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analyses are presented of two-dimensional laboratory measurements of the forces induced by breaking waves on a vertical barrier placed on a plane with a one-to-ten slope. The deepwater wave heights ranged from 0.2 to 0.6 foot and their periods ranged from 1.9 to 3.3 seconds. The ratio between the depth of water in front of the barrier and the deepwater wave length was approximately 0.0115. The forces on the barrier in this study are usually characterized by a peak, which occurs immediately after the initial impact. The impulse of the peak is usually a small percentage of the cumulative impulse up to the time of momentum reversal. After this short-duration peak, the force decreases exponentially

until after an appreciable part of the wave period - about one-sixth, depending on the wave steepness - when it rises again to a (second) maximum which occurs at the time of momentum reversal. This maximum in the force is approximately equal to the average force from the time of initial impact to the time of this maximum of rise (momentum reversal). (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604454

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GAME THEORETIC APPROACH TO SPACE VEHICLE PRELAUNCH ACTIVITIES SCHEDULING,

Personal Author(s):

Firstman,Sidney I

Report Date:

Jan 1962

Media Count:

28 Page(s)

Report Number(s):

P-2538

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Two plausible objectives for the sequence of prelaunch activities for a space vehicle are (1) to maximize the probability that the countdown is successful in the sense that it terminates either with a vehicle that is launch ready or else the countdown is wisely aborted, and (2) to maximize the probability that each countdown culminates in a successful launch. These two objectives, while superficially similar, do not, in general, result in the same preferred sequences. This paper, which proves the foregoing assertion, uses the second objective in exploring the application of Game Theory to the problem of developing a preferred sequence.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605632

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LINEAR PROGRAMMING,

Personal Author(s):

Kao,Richard C

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Number(s):

P-2514

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The optimal diet problem is solved using the method of linear programming. A general discussion and suggested fields of application of linear programming are included.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0612978

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIMULATION OF A BIOLOGICAL SYSTEM ON AN ANALOG COMPUTER,

Personal Author(s):

De Land,Edward C

Report Date:

Jan 1962

Media Count:

11 Page(s)

Report Number(s):

P-2307

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper demonstrates a method for simulating complex chemical equilibria and uses the respiratory function of the blood at the lung surface as an example. The analog computer is employed because its characteristic parallel computation and its fast solution-time enable the simulation of dynamic systems in real time. The results obtained for a small model indicate that the accuracy and stability are sufficient for analysis within the laboratory experimental error. The method is very flexible; basic models may be expanded to incorporate more complex phenomena. The digital computer gives results which are more accurate and reproducible but it has a slower solution time. This mathematical model of a biological system is the first in a series of simulations which will become successively more complex and, hence, more realistic representations of the biological system. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604361

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LORD RUSSELL, UNILATERALISM AND THE LABOUR PARTY,

Personal Author(s):

DEWeerd,H A

Report Date:

Jan 1962

Media Count:

28 Page(s)
Report Number(s):
P-2509
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:
AD0613130
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SIMULATION AND LONG-RANGE PLANNING FOR RESOURCE ALLOCATION,
Personal Author(s):
Rauner,Robert M
Steger,Wilbur A
Report Date:
Jan 1962
Media Count:
28 Page(s)
Report Number(s):
P-2223-1
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Abstract:

(U) The problem of allocating productive resources to attain some predetermined objective is studied in Air Force logistics organizations. In this paper is described a major Laboratory simulation that was conducted several years ago. Although the primary othe primary objective of the simulation was to obtain results useful to Air Force planners, it is believed that the research method may be of interest to economists more generally.

Abstract Classification:

Unclassified

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0269104

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SATELLITE CHARGE-UP AS A MEANS OF MAINTAINING THE SHAPE OF ECHO-TYPE SATELLITES IN THE
OUTER VAN ALLEN BELT

Personal Author(s):

HUNDLEY,R O

Report Date:

Dec 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0413607

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE FINANCIAL PORTION OF A MANAGEMENT INFORMATION SYSTEM,

Personal Author(s):

Pardee, F S

Report Date:

Dec 1961

Media Count:

45 Page(s)

Report Number(s):

RM-2836-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Abstract:

(U) This memorandum suggests that an operational financial system should include: A capability to prepare and present summary force structure costs showing cradle-to-grave implications by research and development, investment, and operation for alternative major mission or overall force mixes. A series of cost sensitivity curves on each major weapon system showing the financial implications of alternative design and operational concept characteristics and financial studies of alternative con-system programs, particularly in the basic and applied research areas. Descriptive data sufficient to make the sensitivity studies and force mix analyses meaningful. A carefully designed data accumulation procedure composed of consistent classification which are increasingly aggregated for each ascending management level. An estimating relationship research activity whose function is converting basic cost data into building blocks convenient for use in preparing cradle to-grave costs for a wide variety of alternatives, and a status review capability to permit comparison of progress against the plan, adequate not only to assure fiduciary responsibility but also to assure efficient actual physical project execution within estimated costs. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0269105

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VALUES OF LARGE GAMES, III: A CORPORATION WITH TWO LARGE STOCKHOLDERS

Personal Author(s):

SHAPLEY, L S

Report Date:

Dec 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0269106

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SOVIET OIL OFFENSIVE AND INTER-BLOC ECONOMIC COMPETITION

Personal Author(s):

LUBELL, HAROLD

Report Date:

Dec 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0268940

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPERATIONAL CRITERIA FOR THE DESIGN OF MISSILE READINESS TESTING PROGRAMS AND EQUIPMENT

Personal Author(s):

BROM,J R

FIRSTMAN,S I

Report Date:

Dec 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Identifiers: ACE project. The increasing complexity of modern weapons and the growing por o ir nearinstantaneous readiness for action h ve forced developm nt of very rapid readin s testi g procedures, w ich of necessity, had to be at least p rtilly tomated for speed. Because much of the automatic checkout equipment (ACE) ws deoped to meet imme iate needs, without careful integration of itssign of the prime equipment and ground support equipment, technical misfits and inefficiency have resulted. I i demonstrated how missile readiness (the robabi y that the missile is op rativ an ready to launch at any future time) is influ nced by equipment, weapon sy tem , a d operational factors. An effective r adiness testing program is also studied for each component, and hence for the entire missile or weapon syst m. A mathematical model is developed that rees le iness to relevant physical and operational factors. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0268491

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/268491.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD268491>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) VARIATIONAL METHODS IN PROBLEMS OF CONTROL AND PROGRAMMING

Descriptive Note:

Memorandum rept.

Personal Author(s):

BERKOVITZ, LEONARD D

Report Date:

Dec 1961

Media Count:

52 Page(s)

Report Number(s):

RAND/RM-2888-PR

XC-USAF

Contract Number:

AF49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0268643

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RESEARCH PROCEDURES IN MACHINE TRANSLATION

Personal Author(s):

HAYS,DAVID G

Report Date:

Dec 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0269713

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECT OF SURFACE TEMPERATURE VARIATIONS ON THE POLAR NIGHT JET

Personal Author(s):

LEOVY,C

Report Date:

Dec 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The possibility of differential heating in the ozone layer due to differences in ground and lower troposphere temperatures as a mechanism for producing the observed stationary perturbations of the polar night jet was examined. It is found that this mechanism is not likely to be the cause of the disturbances. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604591

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS, APPENDIX 1,

Personal Author(s):

Gruenberger,F J

McCracken,D D

Report Date:

Dec 1961

Media Count:

6 Page(s)

Report Number(s):

P-2504

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A problem in Diophantine equations (one equation with two unknowns) is examined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604593

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS, APPENDIX 4,

Personal Author(s):

Gruenberger,F J

McCracken,D D

Report Date:

Dec 1961

Media Count:

5 Page(s)

Report Number(s):

P-2506

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A bookkeeping routine is suggested where the computer maintains a grade book for the student class.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604592

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS, APPENDIX 3,

Personal Author(s):

Gruenberger,F J

McCracken,D D

Report Date:

Dec 1961

Media Count:

8 Page(s)

Report Number(s):

P-2505

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The common situation of incorrectly modified addresses for storage searches and the value of a search routine are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604672

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SHORT TABLE OF PRIME NUMBERS,

Personal Author(s):

Armerding,George

Gruenberger,Fred

Report Date:

Dec 1961

Media Count:

40 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The first 9500 prime numbers (considering unity as a prime) are listed here together with an index number (from 1 to 9500). (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0269714

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SUCCESSION PROBLEM AND THE TRANSITION TO COMMUNISM

Personal Author(s):

RUSH,MYRON

Report Date:

Dec 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0270859

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIMITING DISTRIBUTIONS FOR CRITICAL MULTITYPE BRANCHING PROCESSES WITH DISCRETE TIME

Personal Author(s):

MULLIKIN,T W

Report Date:

Dec 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theory of branching processes treats the multiplication of objects subject to laws of chance. It has been applied to such phenomena as bacterial fission, cosmic ray showers, and neutron chain reactions. This report describes the probability law governing the descendants of a single object after many generations, if on the average an object has just one surviving child (in the language of reactors, this is the critical case). These results could be useful in the study of controlled nuclear reactions.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604675

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604675.pdf

Size: 569 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604675>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME STATISTICAL PROPERTIES OF SELECTED INVENTORY MODELS

Personal Author(s):

Geisler, Murray A

Report Date:

Dec 1961

Media Count:

33 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) In the study of inventory policies an interest is shown not only in the mean values of such important random variables as number of shortages per time period, but also in their variance and covariance properties. Such additional properties are of interest in interpreting the stability of an expected value, under assumed inventory policies and parameters, and in using stochastic or Monte Carlo models to calculate estimates of the expected values by sampling techniques. In this paper, comparatively simple inventory models are examined and the expected value, variance, and selected covariance and correlations of the random variables representing stock on hand, shortages per period, overages per period and reorder quantity are derived.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604587

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS. CHAPTER 8: USING THE RANDOM NUMBER GENERATOR,

Personal Author(s):

Gruenberger,F D

McCracken,D D

Report Date:

Dec 1961

Media Count:

27 Page(s)

Report Number(s):

P-2490

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A number of problems or games involving random number generators are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0269712

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ADIABATIC-ISOTHERMAL NOZZLE

Personal Author(s):

STEPANCHUK,V F

Report Date:

Dec 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method is presented for the nozzle calculation for a chemically active flow at a constant static temperature. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604792

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE 22ND CONGRESS OF THE CPSU: SOME DOMESTIC IMPLICATIONS,

Personal Author(s):

Hoeffding,Oleg

Report Date:

Dec 1961

Media Count:

14 Page(s)

Report Number(s):

P-2493

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion of the political and economic assertions of the 22nd Communist Party Congress is presented. A view of Soviet economy in 1980 is projected.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604676

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) JAPAN AND HER SOVIET NEIGHBOR DURING THE INTERWAR YEARS; JAPANESE IMAGES AND REACTIONS,

Personal Author(s):

Langer,Paul F

Report Date:

Dec 1961

Media Count:

21 Page(s)

Report Number(s):

P-2508

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0281771

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Electromagnetic Signal due to the Exclusion of the Earth's Magnetic Field by Nuclear Explosions.

Report Date:

Dec 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) There are three mechanisms by which a vertical magnetic field might be generated by a nuclear explosion. Only two methods are treated. Compton currents produced by explosion gamma rays might interact with the earth's field and generate a back field tending to cancel the earth's field in a region about the explosion. Such a cancellation would be equivalent to radiation from a magnetic dipole and therefore could lead to a vertical magnetic field. On a much longer time scale, the blast wave motion of the heated (conducting) air surrounding the explosion might exclude the earth's field and thus generate a low frequency variation in the vertical component of the magnetic field. It is shown that due to air conductivity and the fact that gamma rays travel with light speed, the Compton currents do not exclude the earth's field. The blast wave motion does exclude the field and the magnitude of the resultant electromagnetic field is estimated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606760

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME THEOREMS CONCERNING THE MOTION OF AN ELECTRICALLY CHARGED PARTICLE IN A DIPOLE
MAGNETIC FIELD,

Personal Author(s):

Ray, Ernest C

Kasper, Joseph E

Report Date:

Dec 1961

Media Count:

30 Page(s)

Report Number(s):

P-2496

Contract Number:

NASw17

NAS5 276

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Various theorems related to the application to cosmic rays of the theory of the motion of an electrically charged particle in a dipole magnetic field are proved. The theorems are essentially those conjectured by Schremp. In making the proofs, it is assumed that the so called trajectories of the first and second kinds have certain proper ties in the large. These properties can be verified numerically and by series expansions in any particular case. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0636175

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DECISIONS, COMMUNICATION, AND ORGANIZATION.

Personal Author(s):

Farmer, James

Report Date:

Dec 1961

Media Count:

30 Page(s)

Report Number(s):

P-2495

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper describes how mathematical models can be used in the theory of organization. Authority relationships are used to develop a canonical form of organization. Communication constraints on the canonical form are shown. A stratified organization, used when a canonical form cannot be used to satisfy the constraints, is described. Organizational effects of varying communication load and a sequential decision process model are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0610218

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE JOURNEY-TO-WORK AS A DETERMINANT OF RESIDENTIAL LOCATION,

Personal Author(s):

Kain,John F

Report Date:

Dec 1961

Media Count:

42 Page(s)

Report Number(s):

P-2489

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This study presents some empirical evidence on the manner in which transportation costs influence the household's choice of a residential location. It also describes a residential location model which considers the problem of residential location. This model makes it easier to understand the empirical tests offered in this paper. The central hypothesis, suggested by this and similar models, is that households substitute journey-to-work expenditures for site expenditures. This substitution depends primarily on household preferences for low-density as opposed to high-density residential services.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606327

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AUTOMATIC DATA-PROCESSING FOR PRODUCTION CONTROL,

Personal Author(s):

Hill,L S

Report Date:

Dec 1961

Media Count:

1 Page(s)

Report Number(s):

P-2497

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is the purpose of the paper to present in abridged form a synthesized procedure for control of production using punched-card methods. The system may be considered a framework for application to

any manufacturing enterprise engaged in the fabrication and assembly of parts, regardless of product. Machines are used to record and coordinate all paperwork involved in manufacturing from time of raw material receipt through transformation into finished product. A collateral objective of this presentation is to indicate that mechanization of the production control system is a logical role for the Industrial Engineer. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0613681

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME ASPECTS OF QUASILINEARIZATION,

Personal Author(s):

Kalaba,Robert

Report Date:

Dec 1961

Media Count:

26 Page(s)

Report Number(s):

RM-2924-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Many of the fundamental nonlinear differential equations of mathematical physics and engineering can be written in the form $L(u) = \max (M(u,x,q) + a(x,q))$, where L and M are linear differential operators on u , a a scalar function of the vector x , and q is a decision variable. Among these equations are the Riccati equation, which plays a role in studies of wave propagation, neutron transport, and filter theory; the Emden-Fowler equation, of importance in astrophysical and nuclear studies; the Hamilton-Jacobi equation of mechanics; the eikonal equation of optics; and others. In addition, it is a basic equation of dynamic programming. In this paper a formula giving a representation for the solution of the above type

of equation is presented. It involves use of 'max' operators applied to solutions of associated linear equations. In turn, this representation formula leads to the construction of quadratically convergent and monotonic sequences of functions which are of utility in the computational solution of nonlinear boundary value problems. Results of some numerical experiments involving both ordinary and partial differential equations are presented. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0613717

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME SUGGESTED TECHNIQUES FOR DATA SYSTEM DEVELOPMENT.

Descriptive Note:

Revised ed.,

Personal Author(s):

Little,J D

Shelton,W V

Report Date:

Dec 1961

Media Count:

17 Page(s)

Report Number(s):

P-2264-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Microfiche only after original copies exhausted.

Abstract:

(U) This paper proposes a set of techniques: critical-path scheduling, specifically PEP/PERT; data element identification and utilization matrices; and programmed internal reporting functions. These techniques can be used in the planning and management of data system development. The data system may be like

ARLS, the Automatic Resupply Logistics System, or a command and control data processing system, or large-scale simulated systems of the type executed at RAND. These techniques could be useful not only in the early planning and implementation phases of system development but also in later stages when analysis of current and earlier models of the system is taking place. Critical-path scheduling is especially applicable during early stages of development and as a control device throughout development activities. Data identification and utilization matrices are particularly suited to the working level management of data system development. The use of internal reporting functions during later development stages provides valuable and necessary information for further development activities.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606193

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BEHAVIOR OF THE FIRM SUBJECT TO EXTERNAL REGULATORY CONSTRAINT,

Personal Author(s):

Averch,Harvey

Johnson,Leland L

Report Date:

Dec 1961

Media Count:

19 Page(s)

Report Number(s):

P-2488

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose here is (a) to develop a theory of the monopoly firm seeking to maximize profit but subject to a constraint on its rate of return and (b) to apply the model to one particular regulated industry -- the U. S. telephone industry.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606508

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME SIMPLE EXAMPLES OF SINGULAR DETECTION OF CONTINUOUS SIGNALS IN NOISE,

Personal Author(s):

Selin,Ivan

Report Date:

Dec 1961

Media Count:

8 Page(s)

Report Number(s):

P-2498

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607674

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SEEKING SOCIAL WELFARE FACTS IN A CALIFORNIA COUNTY: SACRAMENTO,

Personal Author(s):

Bornet,Vaughn D

Report Date:

Dec 1961

Media Count:

15 Page(s)

Report Number(s):

P-2494

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An address to the Citizens' Welfare Advisory Committee of Sacramento County is presented. The Committee's responsibility was to review all welfare programs and administration of those programs, especially as to (1) aims and purposes of welfare legislation, (2) administrative problems of the county department, (3) formulation of recommendations to the Legislature and Congress, and (4) planning of steps which could be taken locally to promote assistance to those who were entitled to it and to deny aid to those who were not entitled to it.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604580

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHAT TO DO ABOUT TEACHER SHORTAGES,

Personal Author(s):

McKean,Roland N

Kershaw,Joseph A

Report Date:

Nov 1961

Media Count:

16 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Today most districts have unified salary schedules, which provide for only two kinds of pay differentials. They provide one set of salary steps for years of teaching experience and another set of steps for total amount of college credits. We urge that communities consider the adoption of a third set of steps for types of training -- so that district officials can offer higher salaries for some kinds of training without simultaneously being compelled to pay higher salaries for all teaching skills. Outside the teaching profession, there are wide salary differentials for various types of training. Average incomes in 1959 were \$14,000 in the medical sciences, \$11,000 in physics, and \$8,000 in meteorology. Similarly, income variations exist for lawyers and ministers having the same amount of education and experience. In other words, it is characteristic of these professions and of professions generally not to have unified salary schedules. Is teaching different from other professions so that it requires an unprofessional salary structure. We think not, and we believe communities should no longer accept uncritically that kind of salary schedule.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604597

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONCEPTS OF LIMITED WAR: AN HISTORICAL APPROACH,

Personal Author(s):

DeWeerd,H A

Report Date:

Nov 1961

Media Count:

21 Page(s)

Report Number(s):

P-2352

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The United States can and must maintain at least a condition of approximate strategic balance with the Soviet Union in the 1960's. If not, it is difficult to see how the United States can contest communist aggressions in the third areas of the world. This in turn will weaken and ultimately destroy the collective security system. The United States can and must maintain a limited war capability which will enable it to contest a fairly wide range of possible communist aggressions in the third areas of the world. It must maintain such a capability because it shall not be able to rely on its strategic forces to deal with limited aggressions in this period. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606328

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DESIGN OF A SEQUENTIAL TEST FOR THE DETECTION OF KNOW SIGNAL IN NORMAL NON-WHITE NOISE,

Personal Author(s):

Selin,Ivan

Report Date:

Nov 1961

Media Count:

14 Page(s)

Report Number(s):

P-2487

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper considers the design of a sequential test for signals in correlated normal noise. Both discrete and continuous time parameters are considered. The noise is assumed to be stationary in the continuous case, but not in the discrete case. Through the transformation of random variables, it is shown that the test of given strength which minimizes expected test length is Wald's sequential probability (likelihood) ratio test. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0266142

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INFORMATION ON THE 1961 MINSK CONFERENCE ON HEAT AND MASS TRANSFER WITH PHASE AND
CHEMICAL CONVERSIONS

Personal Author(s):

GAZLEY, JOY B

GAZLEY, CARL JR

Report Date:

Nov 1961

Media Count:

62 Page(s)

Report Number(s):

RM-2852-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0609771

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A FIRST APPROXIMATION TO A RAND MODEL FOR STUDY OF URBAN TRANSPORTATION,

Personal Author(s):

KAIN,J F

Meyer,J R

Report Date:

Nov 1961

Media Count:

54 Page(s)

Report Number(s):

RM-2878-FF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The report represents a first step in a study to develop a generalized model of an urban complex, for studying the intricate interrelationships between transportation and the spatial organization of economic activities. Consideration is given to definitions and notation, workplace location and nonresidential land-use models, industrial land-use constraints, employment distributions, land value surfaces, residential distributions, residential land-use constraints, status variable modifications, and transportation models.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607162

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RUSSIAN TRANSLITERATION -- SOUND AND SENSE,

Personal Author(s):

Neiswender,Rosemary

Report Date:

Nov 1961

Media Count:

9 Page(s)

Report Number(s):

P-2491

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The transliteration into the Roman alphabet of languages with a non-Roman script is often dismissed, even by librarians, as a rather academic problem--one best left to philologists. To the lay reader, 'Tschaikowsky,' 'Chekhov,' and 'Khrushchev' seem to be spelled in the obvious and only possible manner, and it is something of a puzzlement to encounter in a bibliographic citation or a library catalog the equally defensible versions, 'Chaikovskii,' 'Tschechhoff,' and 'Hruscev.' These randomly chosen but fairly representative examples illustrate graphically the predicament of the researcher attempting to verify Slavic names and titles referenced in foreign (and many American) publications, and equally demonstrate the need for a universally-accepted system of Russian transliteration.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604665

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET UNION AND THE POLITICAL USES OF OUTER SPACE,

Personal Author(s):

Horelick,A L

Report Date:

Nov 1961

Media Count:

44 Page(s)

Report Number(s):

P-2480

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0266149

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RULES FOR PLANNED REPLACEMENT OF AIRCRAFT AND MISSILE PARTS

Personal Author(s):

KAMINS, M

MCCALL, J J

Report Date:

Nov 1961

Media Count:

94 Page(s)

Report Number(s):

RM-2810-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The replacement policies are investigated for aircraft and missile parts. The appropriate policy for a part depends on its failure characteristics and the cost of an in-service failure relative to the cost of a planned replacement. For planned replacement (replacement before failure) to be worthwhile, the part must display a wear-out characteristic (a failure rate increasing with time); and the cost of an in-service failure must be greater than the cost of a planned replacement. The gross savings to be had by following a planned-replacement policy rather than a replacement-at-failure policy are computed for the discrete and for the four continuous distributions. When the relative cost of an in-service failure is large, such savings can be very significant. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0269113

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLAR-FLARE RADIATION AND MANNED SPACE FLIGHT

Personal Author(s):

DUGAS,D J

Report Date:

Nov 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604450

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COSPAR INTERNATIONAL REFERENCE ATMOSPHERE,

Personal Author(s):

KALLMANN-Biji,H

Report Date:

Nov 1961

Media Count:

8 Page(s)

Report Number(s):

P-2474

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The scientific problem of high altitude physics which involves the determination of density, pressure, composition and temperature is discussed. It was found that these properties are not only functions of altitude, but also of local time and position with regard to the surface of the earth. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606660

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME EFFECTS OF RADIATION ON MAN,

Personal Author(s):

Laitin, Howard

Report Date:

Nov 1961

Media Count:

19 Page(s)

Report Number(s):

P-2523

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Radiation effects upon the human organism are described. The discussion includes somatic or total body effects resulting from injury at the biochemical and cellular level. Whole-body exposure to penetrating ionizing radiation--X rays, gamma radiation, and neutron radiation--is considered as well as recovery and long term effects.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604795

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS, CHAPTER 6. SUBROUTINING,

Personal Author(s):

Gruenberger, F J

McCracken, D D

Report Date:

Nov 1961

Media Count:

30 Page(s)

Report Number(s):

P-2481

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Subroutining, the use of a given set of instructions repeatedly that are executed on demand from other instructions, is described.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604509

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604509.pdf

Size: 245 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604509>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COMMENTS ON AN ARTICLE BY CHAS. E. OSGOOD A PSYCHOLOGIST'S CURE FOR THE ARMS RACE

Personal Author(s):

Katz, Amrom H

Report Date:

Nov 1961

Media Count:

7 Page(s)

Report Number(s):

P-2439

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A psychologist's comments on arms control are reviewed. Problems concerning disarmament of the US and USSR are considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604796

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS. CHAPTER 7. RANDOM NUMBERS,

Personal Author(s):

Gruenberger,F J

McCracken,D D

Report Date:

Nov 1961

Media Count:

32 Page(s)

Report Number(s):

P-2475

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Random number generation and computer routines are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604800

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) KHRUSHCHEV'S ATTACK ON ALBANIA AND SINOSOVIET RELATIONS,

Personal Author(s):

Zagoria,Donald S

Report Date:

Nov 1961

Media Count:

36 Page(s)

Report Number(s):

P-2478

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Sino-Soviet struggle over Albania, illustrating the rivalry over power and authority that has existed between Communist China and the USSR since 1956, is discussed. The possibility of a Sino-Soviet split is considered in terms of the differing political ideologies of the two communist nations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604451

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SECONDARY SCHOOLS AND COMPUTING,

Personal Author(s):

Gruenberger, Fred

Report Date:

Nov 1961

Media Count:

5 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The introduction of computing technology and the computers themselves into our secondary schools stands a good chance of being orderly. (1) Courses will be given under the sponsorship of the mathematics or science departments. (2) Suitable textbooks will be available. (3) The instructors will be trained. (4) The machines used, though probably old, will be massproduced, with a wealth of software behind them. In addition, each teacher can seek expert help, if needed, from local industry. The real wave of such courses will probably not come until 1963 or later. For one thing, an introduction to computing might properly belong at the secondary school level-there seems to be a strong analogy to the learning of a foreign language and it has become obvious that the latter subject is best taught to the young. For another thing, since computing skills cut across every discipline, we can reason that we owe it to the college-bound student to prepare him for intelligent use of this tool prior to his college freshman year.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604804

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SYSTEMS ENGINEERING APPROACH TO RELIABILITY,

Personal Author(s):

Boldyreff,Alexander W

Report Date:

Nov 1961

Media Count:

12 Page(s)

Report Number(s):

P-2476

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The main theme of the paper is that reliability must be sought as an integral of the over-all system design. A listing of what should be the principal areas of concern to a reliability engineering organization is presented. Also, a short list of some general methods of increasing system reliability which is believed to be basic in designing for reliability is given.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604793

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCHEDULING STATE OF THE ART, ANATHEMA OR NECESSITY.,

Personal Author(s):

Pardee,F S

Report Date:

Nov 1961

Media Count:

14 Page(s)

Report Number(s):

P-2511

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper explores the meaning of statements concerning the rate of technological advancement and particularly their implications for R and D planning.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605542

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IMBALANCE IN BALANCE 'THEORY',

Personal Author(s):

Jordan,Nehemiah

Report Date:

Nov 1961

Media Count:

1 Page(s)

Report Number(s):

P-2472

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion is presented on Heider's concept of cognitive balance. Articles reviewing the theory are examined in terms of their academic significance in the field of social psychology.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605631

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/605631.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD605631>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) POLITICAL NEGOTIATION AS A PROCESS OF MODIFYING UTILITIES

Personal Author(s):

Ikle, Fred C

Leites, Nathan

Report Date:

Nov 1961

Media Count:

26 Page(s)

Report Number(s):

RAND-P-2482

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Negotiating techniques are discussed in terms of the theory of bargaining and game theory.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0762611

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On Regional Development and Dynamic Models,

Personal Author(s):

Moore, Frederick T

Report Date:

Nov 1961

Media Count:

29 Page(s)

Report Number(s):

P-2342-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Several topics are discussed in the paper. The topics run from the general to the very specific but have a common core. The first section discusses the general problem of appropriate criteria for regional development; this is a problem in 'sub-optimization.' In the second section one particular criterion -- the maximization of the output-investment ratio -- is considered and shown to have some serious flaws. Finally, in the third section, an alternative set of criteria is offered, and a specific dynamic model incorporating those criteria is described. Some results of the application of that model to the economy of the State of California are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

AD0611636

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DEFENSE AND DEVELOPMENT IN LESS DEVELOPED COUNTRIES,

Personal Author(s):

Wolf,Charles ,Jr

Report Date:

26 Oct 1961

Media Count:

13 Page(s)

Report Number(s):

P-2291-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Abstract:

(U) A method is described for examining the question of how military assistance programs in less-developed countries, and their defense forces and budgets, can be modified so as to yield about equivalent military effectiveness, and yet generate improved economic and political side-effects. Research concerned with applying this method to case studies in Viet-Nam and Iran is summarized. The research suggests ways in which program improvements with enhanced side-effects may be made. Qualifications are warranted because of the uncertainties connected with the game-simulation technique for estimating military effectiveness, and the method of judging political sideeffects, used in the study. (Author)

Abstract Classification:

Unclassified

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0634331

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POSSIBLE ECONOMIES THROUGH ELECTRONIC DATA PROCESSING,

Personal Author(s):

Hearle, Edward F R

Report Date:

09 Oct 1961

Media Count:

11 Page(s)

Report Number(s):

P-2452

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Most of the glamour surrounding electronic data processing equipment in recent years has focused on the word 'electronic'. The basic quality of electronics that offers both excitement and economy in municipal data processing is speed. But speed in processing data is not even relevant until the data and their use in municipal operations are fully understood. A large part of the grief you have heard associated with using computers has arisen from this simple error -- people have often concentrated too soon and too much on the equipment, and too little and too late on the data systems which the equipment serves. The author discusses what municipal data processing consists of, and then suggests how electronic equipment can and should be used to provide the economies all municipal officials desire.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604810

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNIST CHINA'S DEMANDS ON THE WORLD,

Personal Author(s):

Halpern,A M

Report Date:

09 Oct 1961

Media Count:

34 Page(s)

Report Number(s):

P-2382-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The attempt was made to identify goals and methods of Chinese foreign policy. It is suggested that the methods tend to form patterns whose variations through time correlate with changes in the goals pursued. Major changes in the grand design since 1949 have occurred twice--in 1951 and 1957. The controlling factor in such shifts has been the perception of the world distribution of power. The Chinese Communists view the distribution of power basically as bipolar. Depending on their analysis of the bipolar power basically as bipolar. Depending on their analysis of the bipolar power balance, their grand design may identify only enemies outside the Communist bloc or may identify some non-Communist countries as potential temporary allies, but ultimately does not tolerate an independent third power factor.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0269285

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THEORY OF IONIZED TRAILS FOR BODIES AT HYPERSONIC SPEEDS

Personal Author(s):

LYKOUDIS,P S

Report Date:

05 Oct 1961

Media Count:

1 Page(s)

Report Number(s):

RM-2682-1

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The characteristics of the gaseous trail remaining behind a body moving through the atmosphere at hypersonic speeds are discussed. Means are sought for ascertaining those variables that can be measured and used to predict the characteristics of the body causing the trail. The available theoretical and experimental literature is reviewed and the basic aspects of hypersonic trails are presented. In the case of thermodynamic equilibrium, a universal solution is found for the velocity and enthalpy distributions at a station behind the body where the pressure has reached its ambient free-stream value. The thermal-conduction part of the trail is also studied. An analytic solution is found for the case of variable thermal conductivity. The length of the trail based on a minimum ionization level is calculated at different altitudes for an illustrative re-entry. The influence of the trailing shock on the conduction part of the trail is discussed. A preliminary study is also made of the trail under chemically frozen conditions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605772

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS. CHAPTER 4: PROGRAMMING AND CODING,

Personal Author(s):

Gruenberger,F J

McCracken,D D

Report Date:

Oct 1961

Media Count:

1 Page(s)

Report Number(s):

P-2451

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Coding, an activity included in programming, is introduced. This activity follows flow charting and is where the procedure defined in the flowchart is translated into a language the machine can accept.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604805

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MACRO INVESTMENT MODEL FOR MANUFACTURING,

Personal Author(s):

Niedercorn,John H

Report Date:

Oct 1961

Media Count:

24 Page(s)

Report Number(s):

P-2468

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This article presents the derivation, statistical testing and evaluation of a new investment model for investment in manufacturing industries. It is called an evolutionary model because it is based on some fundamental assumptions about the evaluation of the economy over time. With the help of a few additional assumptions two macro investment functions are deduced from the model. They show that aggregate investment depends on the rate of growth of total output, the gap between desired and actual capital stock, and a change in profit variable to show the state of short run expectations. Statistical testing of the two investment functions on data for investment in plant and equipment in manufacturing is favorable. Unfortunately, the statistical fit of the model is unsatisfactory when tested on data for aggregate investment in plant and equipment in all industries. This result seems to indicate that investment in plant and equipment in all industries is too highly aggregated a concept to analyze with a single investment function. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605781

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INFORMATION RETRIEVAL: A LOOK AT THE LOGICAL FRAMEWORK AND SOME NEW CONCEPTS,

Personal Author(s):

Maron,M E

Report Date:

Oct 1961

Media Count:

1 Page(s)

Report Number(s):

P-2455

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Information retrieval is discussed and related to fields of study which have important implications for an understanding and ultimate unmasking of the problem of automatic information retrieval. These related studies are called the Information Sciences and include those sciences and techniques which have a concern for the commodity of information. How information can be measured, encoded and decoded, transmitted and stored, processed most efficiently by machine; and how it is received and processed by the human nervous system are examined under such headings as information theory, communication theory, computer switching and control theory, theory of automata and perceptrons and under the general heading of Cybernetics, which is the study of information and control in machines and men.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604491

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USE OF WAR GAMES IN COMMAND AND CONTROL ANALYSIS,

Personal Author(s):

WEINER,Milton G

Report Date:

Oct 1961

Media Count:

13 Page(s)

Report Number(s):

P-2466

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An attempt to wed command and control operations to war games in order to understand the processes and problems of command and control is examined. It is concluded that this analysis of command and control provides a new use for war gaming studies. In it, the detailed, dynamic representation of the situation, complete with the fog of war and the human equation, are very important ingredients.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604363

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STATISTICS ON THE FIRST SIX MILLION PRIME NUMBERS,

Personal Author(s):

Gruenberger,F

Armerding,G

Report Date:

Oct 1961

Media Count:

150 Page(s)

Report Number(s):

P-2460

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The first table shows the distribution of differences between successive primes, as well as the first occurrence of each difference. The second table exhibits every difference greater than 100 with the lower prime of the pair being printed. The third table shows, for every 50,000 natural numbers, the following information: (1) The number of primes in the indicated range; (2) The last prime to be found in the range; (3) The number of occurrences of triplets having the difference pattern 2,4; (4) The number of occurrences of triplets having the difference pattern 4,2; (5) The number of occurrences of quartets having the difference pattern 2,4,2. The fourth table displays explicitly the lowest prime of each four having a 2,4,2 difference pattern. The fifth table lists the number of occurrences of twin primes in each range of 100,000 natural numbers.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605694

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BY AUTOMOBILE THROUGH WESTERN RUSSIA,

Personal Author(s):

De Land,Edward C

Report Date:

Oct 1961

Media Count:

65 Page(s)

Report Number(s):

P-2461

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A tourist's trip through western Russia, Poland, and Czechoslovakia is described. Personal observations of the culture, the people, transportation and recreational facilities, the major cities, and rural areas are given.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0412984

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/412984.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD412984>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ELECTROMAGNETIC RADIATION FROM A NUCLEAR EXPLOSION IN SPACE

Descriptive Note:

Memo rept.

Personal Author(s):

Latter, R

Karzas, W J

Report Date:

Oct 1961

Media Count:

40 Page(s)

Report Number(s):

RM-2849-AFT

XD-ARPA

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The gamma rays from a nuclear explosion in space Compton scatter electrons near the surface of the device or in a surrounding material shield. The scattered electrons leave the surface and are accelerated back toward it by the positively charged matter. Provided they are asymmetrically distributed, the accelerating electrons radiate an electromagnetic signal. The electron motions are analyzed, the electromagnetic signal is estimated, and its detectability is discussed. For a typical nuclear explosion, the electromagnetic signal is independent of the yield and contains frequencies up to 10 to 100 megacycles per second and thus will penetrate the ionosphere. Taking into account dispersion by the ambient interplanetary plasma (approximately equal to 10 sq. electrons/cc), the peak electric field strength at a distance R kilometers from the explosion is approximately equal to 10 to the 4th power R exp (-3/2) volts/ meter. The pulse length is approximately equal to 10 to the minus 10 power R sec. If only background cosmic noise limits detectability of the signal, the maximum detectable range is about 10 to the sixth power km.

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0605540

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN ECONOMIC PLANNING: A TRIP REPORT,

Personal Author(s):

Moore, Frederick T

Report Date:

Oct 1961

Media Count:

1 Page(s)

Report Number(s):

P-2469

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A variety of people in Paris and London were interviewed about European attitudes towards foreign aid, economic integration, and domestic economic planning. An original skepticism about the potential fruitfulness of the discussions gave way to surprise at the frankness with which the individuals discussed present and future policies and problems. The attitudes and probable courses of action that were presented will in many cases pose special challenges to U. S. foreign (and domestic) economic policy.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604359

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCIENCE AND STATECRAFT,

Personal Author(s):
Denny,Brewster C
Mesthene,Emmanuel G
Report Date:
Oct 1961
Media Count:
18 Page(s)
Report Number(s):
P-2462
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:
(U) The paper discusses the role of science in national security.
Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604362
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE MESOSPHERE,
Personal Author(s):
Batten,E S
Report Date:
Oct 1961
Media Count:
10 Page(s)
Report Number(s):
P-2477
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) During the 1960--61 period, scientific activity increased in the mesosphere prompted by an accelerated rocket program. Small meteorological rockets were developed and used more or less synoptically to probe the atmosphere to heights of 70 km. The data collected from these rockets at locations in the United States, Canada, and the Pacific Ocean, combined with data collected during the IGY, have confirmed old concepts of the circulation and temperature structure of the mesosphere and provided the investigators with new puzzles to be solved. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605693

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET NATIONAL INCOME,

Personal Author(s):

Bergson,Abram

Report Date:

Oct 1961

Media Count:

64 Page(s)

Report Number(s):

P-2148-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The rate of growth of total output and the rate of growth of factor productivity in the USSR are discussed. The productivity of different factors taken together and corresponding trends in the United States are also examined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607466

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPRAISAL OF LABORATORY SIMULATION EXPERIENCES,

Personal Author(s):

Geisler,Murray A

Report Date:

Oct 1961

Media Count:

11 Page(s)

Report Number(s):

P-2467

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604513

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HUMAN FACTORS ASPECTS IN MAINTAINABILITY,

Personal Author(s):

Jordan,Nehemiah

Report Date:

Oct 1961

Media Count:

12 Page(s)

Report Number(s):

P-2459

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The broad area of maintainability, as discussed by human factors scientists and engineers, is subdivided into three major interdependent sub-areas. They are: design for maintainability; training the maintenance man to be able to assume the responsibility for maintaining the equipment; and the tools, equipment and/or aids that are necessary to enable the maintenance man to meet his responsibilities.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0265337

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COST OF A HARDENED, NATIONWIDE BURIED CABLE NETWORK

Personal Author(s):

CHESTER,J

Report Date:

Oct 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A study was made of the cost magnitudes of building and operating a new, hardened buried cable communication network of nationwide coverage to be used by the military services, Central Intelligence Agency, State Department and the President in order to enhance the over-all capability of the network including its capability for survival in times of national emergency. Depending upon the hardness requirements imposed on such a network, (in terms of overpressure in pounds per square inch), initial

investment magnitudes can be expected to run as high as \$2.4 billion for a 100 psi configuration to \$3.4 billion for the same network hardened at all points to 1,000 psi. It was assumed that these investment costs would be borne by private industry and the military users would pay for the service in the form of annual lease costs. The magnitude of the Air Force share of such annual charges in the current decade was estimated to vary from perhaps \$550 million for a 100 psi network to as much as \$780 million for the 1,000 psi configuration. It must be remembered, however, that the planned-for annual cost for the current type of soft, vulnerable communications for the Air Force in the same decade will represent a significant portion of those figures. The incremental annual increase in cost resulting from operation of a new network like the example used in this study would probably lie between \$350 and \$500 million for the 1,000 psi configuration. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0267167

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMICS DEPARTMENT PUBLICATIONS, 1948-1961; AN AUTHOR INDEX OF THE OPEN LITERATURE, WITH ABSTRACTS

Personal Author(s):

PORCH,HARRIETT

Report Date:

Oct 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605740

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE STRENGTH OF UNDERGROUND CAVITIES OF SPHERICAL AND SPHEROIDAL GEOMETRY,

Personal Author(s):

Green,J M

Report Date:

Oct 1961

Media Count:

8 Page(s)

Report Number(s):

RM-2798-AEC

Contract Number:

AT11 1 135

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Expressions are exhibited for the static-stress distribution over the surface of a degenerate prolate spheroidal cavity which is subjected to a given internal pressure and a given lithostatic loading at infinity. The hoop stress is evaluated at the apex of the spheroidal cavity and is compared with the hoop stress at the corresponding point of a spherical cavity, which is subjected to the same loading. Both cavities are presumed to fail when the hoop stress ceases to be compressive. It is shown that the maximum internal pressure which may be sustained by each of the cavities depends on the Poisson ratio. For certain values of the Poisson ratio, the spherical cavity can actually contain larger internal pressures than the spheroidal cavity, in spite of the fact that when the cavities are 'empty' the spheroidal cavity has a hoop stress at its apex which is more compressive than that of the spherical cavity. These conclusions are of interest in the choice of a geometry for underground cavities which are designed to contain materials held at very high pressures. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607361

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS. CHAPTER 4: PROGRAMMING AND CODING,

Personal Author(s):

Gruenberger,F J

McCracken,D D

Report Date:

Oct 1961

Media Count:

5 Page(s)

Report Number(s):

P-2451-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An introduction is given to coding, an activity of computer programming that follows flowcharting. Coding is defined as the translation of the flowchart information into a language or instruction the machine can accept.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605738

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS. CHAPTER 5: LOOPING,

Personal Author(s):

Gruenberger,F J

McCracken,D D

Report Date:

Oct 1961

Media Count:

8 Page(s)

Report Number(s):

P-2465

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Looping, which is a basic tool in programming and coding, offers certain clear advantages. Loops save storage space; are easier to write and debug; are easily modified to perform more or less work; and, most important, must be used in order to make our computer useful. Loops also offer the best illustration of the stored program concept: the computer can modify its own instructions during execution, and repeat them selectively.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0266630

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ORBITAL CONTROL PROCESS FOR A 24-HOUR COMMUNICATION SATELLITE

Personal Author(s):

SMITH,F T

HUTCHESON,J H

Report Date:

Oct 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A description is given of a guidance or orbital control process particularly applicable for use with a 24-hour communication satellite. The process is based on fundamental principles of celestial mechanics, and places the main burden of error sensing and computation on ground stations. The first objective is to enable a satellite to rendezvous with a hypothetical reference satellite of point which is moving in a specified reference orbit, with a period of one sidereal day. When this objective is accomplished within tolerable errors, the system may be used as necessary to reduce errors arising from perturbations due to the gravitational accelerations of the sun, moon, and earth's bulge. The guidance process, the mathematical relationships involved, and some details of simulating its operation on a digital computer are discussed. The process itself depends on obtaining six or more independent observations, from one or more ground stations, of a satellite moving in some non-reference orbit as dictated by state-of-the-art injection cut-off errors. These observational quantities permit the calculation of orbital parameter errors (as compared to the reference orbit). It is then possible to drive errors nearly to zero by applying corrective thrust to the vehicle in accordance with mathematical relationship or guidance law. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0264769

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIX TASKS IN COMPUTATIONAL LINGUISTICS

Personal Author(s):

HARPER,K E

HAYS,D G

Report Date:

Oct 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Three linguistic problems are discussed: distributional-semantic classification of Russian words, statistical procedures for the discovery of grammatical transformations, and derivational family

classification of Russian words. A set of programs for management of a file of unedited test on magnetic tape is reported. One program to be included in a set of glossary-management programs, this one an editing program, is described. Text improvements, setting requirements for a text-editing program, are reported. A list of technical notes prepared under the contract is appended. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604364

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BEGINNER'S FORTRAN,

Personal Author(s):

SWEETLAND,A

Report Date:

Oct 1961

Media Count:

71 Page(s)

Report Number(s):

P-2457

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Simple mathematical problems are used to illustrate page format. Flow diagrams and the logic of testing are covered. Inputs, Outputs and card layouts are also explained.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605785

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THROW-AWAY MAINTENANCE POLICIES,

Personal Author(s):

Bell,Chauncey F

Report Date:

Oct 1961

Media Count:

1 Page(s)

Report Number(s):

P-2453

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this report is to explore those areas where there is, or can be, a choice between the policies of throw-away and of repair or renewal. The discussion lists the advantages and disadvantages most commonly advanced in support of each policy as well as the important parameters to be considered in arriving at policy decisions.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605787

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS. CHAPTER 3: FLOWCHARTING,

Personal Author(s):

Gruenberger,F J

McCracken,D D

Report Date:

Oct 1961

Media Count:

1 Page(s)

Report Number(s):

P-2443

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Three main reasons for drawing flowcharts are discussed: a flowchart lays out pictorially the logic of the problem solution; the flowchart breaks up the solution into small pieces, each of which is easy to work with; and a flowchart is an excellent means of communication.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0650440

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTEGRATED MATERIEL MANAGEMENT,

Personal Author(s):

Nelson,H W

Petersen,J W

Report Date:

Oct 1961

Media Count:

38 Page(s)

Report Number(s):

RM-2870-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Much effort has been devoted to the study of materiel management, addressing such subjects as demand prediction, flyaway kits, stockage policy, depot repair operations, provisioning, and inventory control. One conclusion drawn from this experience is that support performance can be improved by establishing an integrated and responsive support structure. There are two general questions to be answered: How to integrate support operations, and, How responsive should the system be. The paper reviews the support problem and the method used to integrate support operations. The paper discusses the nature and value of system response and the implication of these results for Air Force support operations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0645464

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON ANTINEUTRINO CROSS SECTIONS AND ON DETECTION OF ANTINEUTRINOS FROM
NUCLEAR EXPLOSIONS,

Personal Author(s):

Karzas,W J

Latter,R

Report Date:

Oct 1961

Media Count:

13 Page(s)

Report Number(s):

RM-2847-ARPA

Contract Number:

SD-79

ARPA Order-189-61

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Cross sections for various antineutrino reactions are estimated. Based on these estimates it is concluded that no antineutrino reactions are useful as a basis for detecting nuclear explosions at great distances. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0265335

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SELECTED LIST OF UNCLASSIFIED PUBLICATIONS OF THE SOCIAL SCIENCE DEPARTMENT THE RAND CORPORATION. 1948-1961

Report Date:

15 Sep 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) AD-265 336Div. 6U (TIPSW/DLW) OTS price \$19.75 Radio Corp. of America, Moorestown, N. J. RADAR PARAMETER MEASUREMENT PROGRAM. Interim rept. for 1 Apr-15 Nov 60. 15 Nov 61, 319p. incl. illus. tables. (Contract DA 36-039-sc-78311) Unclassified report DESCRIPTORS: (*Radar tracking, Search radar, Radar equipment, C band, Instrumentation, Calibration, Effectiveness, Test facilities, Tests.) (Parametric amplifiers, Design.) (Electromagnetic waves, Radar reflections, Atmospheric refraction, Attenuation, Noise (Radar), Propagation, Radiometers, Errors, Measurement.) Open-ended Terms: AN/FPS-16. The techniques and results are presented of the theoretical and experimental research leading to the improvement of the AN/FPS-16 radar system. Presented are the detailed findings and analyses of the experimental data taken during AN/FPS-16 (XN-3) tracking tests with carefully controlled conditions of test and radar operational parameters. The targets used for the tracking tests performed included boresight tower, ballooncarried single and dual spheres, and the sun to determine the effects of atmospheric refraction and attenuation, target multipath, target

scintillation, angle tracking error due to thermal noise, and angular accuracy and precision of the sun and boresight target. Also presented are the findings and analyses of signal strength calibration and stability, field intensity measurements, range system automatic lock-on probability measurements, absolute accuracy of the radar pedestal system by star observation, and the initial development effort for breadboarded parametric amplifiers for the AN/FPS-16 radars. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605789

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS. CHAPTER 2: THE ORGANIZATION OF THE COMPUTER,

Personal Author(s):

Gruenberger,F J

McCracken,D D

Report Date:

08 Sep 1961

Media Count:

1 Page(s)

Report Number(s):

P-2440

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper discusses the following fundamentals of the electronic computer; characteristics of storage, pattern of the computer, the computer instruction, the operands of an instruction, the computer's cycle of operations, types of addressing, and loading storage.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604483

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HOW WELL DO WE KNOW THE SOVIET UNION.

Personal Author(s):

Goure,Leon

Report Date:

07 Sep 1961

Media Count:

15 Page(s)

Report Number(s):

P-2438

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) While we go on trying to improve our knowledge and understanding of the Soviet Union, we cannot guarantee ourselves against errors in judgement or occasional surprises from unanticipated Soviet moves. The consequences of the shortcomings in our knowledge of the Soviet Union will be considerably mitigated if the West avoids accepting the passive role of responding to Soviet political initiative and instead pursues a consistent and dynamic policy of its own.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604666

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME SIMPLEX-LIKE NONLINEAR PROGRAMMING PROCEDURES,

Personal Author(s):

Wolfe, Philip

Report Date:

Sep 1961

Media Count:

19 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Four computational techniques, based on the simplex method, for the solution of nonlinear programming problems are described and compared. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0264430

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GLOSSARY OF TERMS ON NATIONAL SECURITY

Personal Author(s):

GENENSKY, S M

HELMER, OLAF

Report Date:

Sep 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0264604

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CLASSICAL ELECTRON THEORY FROM A MODERN STANDPOINT

Personal Author(s):

COLEMAN,SIDNEY

Report Date:

Sep 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The classical theory of a charged point particle interacting with the electromagnetic field is developed from first principles. The formalism is constructed so as to reveal the underlying physic and to stress the similarity between the classical theory and the corresponding quantum theory. A number of traditionally troublesome points are discussed, including the electro agnetic selfenergy, the relativistic radiation-reaction eq ation, the occurrence and removal of runaway modes, the radiation from a uniformly accelerated charge, an the relation between Maxwell's electrodynamics and the action-at-a-distance theory of Wheeler and Feynman. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0263628

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DECOMPOSITION ALGORITHM FOR LINEAR PROGRAMMING. NOTES ON LINEAR PROGRAMMING AND EXTENSIONS. PART 57

Personal Author(s):

DANTZIG,GEORGE B

WOLFE,PHILIP

Report Date:

Sep 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A procedure is presented for the efficient computational solution of linear programs having a certain structural property characteristic of a large class of problems of practical interest. This property makes possible the decomposition of the problem into a sequence of small linear programs whose iterate solutions solve the given problem through a generalization of the simple method for linear programming. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0263583

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME CHARACTERISTICS OF THE ELLIPTIC GAUSSIAN DISTRIBUTION

Personal Author(s):

SNOW,ROGER

Report Date:

Sep 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) D - %*(N5 AD - %*\$Div. 7U (TIPSP/WH) OTS PRICE \$5.60 Naval Ordnance Lab White Oak, Md. LINEAR LUMPED PARAMETER ANALYSIS OF SYNCHROSCOPIC SYSTEMS CONTAINING CONTROL SYNCHROS, by G. H. Iss and J H Rose bloom. 31 July 53 51p. incl. illus. (N VOR REPT. NO. %+)) Unclassified report DSCRIPTORS: (*Electric servomechanisms, *Electric I networks, Design *Impedance, ELECTRICAL PROPERTIES, Transformers.) (Control systems, Analysis, Electric I engine ring, Synchros.) The theory of synchro systems is investigated. Properties of interest, especially accuracy for synchro control systems both loaded and unloaded with a wye in parallel are treated. Formulas for the properties given in terms of the impedance are applied to design cases: a simple control system with a loaded transformer rotor, n wyes in parallel, a load in parallel consisting of n transformer with load d rotors. The cases are solved by a technique employing equivalent circuits.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605783

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYSTEMATIC METHODS FOR PROGRAMMING SIMPLIFICATION,

Personal Author(s):

Van Horn, Richard L

Report Date:

Sep 1961

Media Count:

8 Page(s)

Report Number(s):

P-2447

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Programming, as used here, covers the lengthy and involved process of going from a detailed concept to an operating data system. It therefore includes analysis, development of logic charts, coding, testing, development of procedures, preparing of manuals, and other related functions. Particular attention is given to projects that are very large, involve 'new concepts,' or both.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605786

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SATELLITE CHARGE-UP IN THE OUTER VAN ALLEN BELT,

Personal Author(s):

Hundley,R O

Report Date:

Sep 1961

Media Count:

8 Page(s)

Report Number(s):

P-2441

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The discussion of satellite charge-up is extended to include the case of satellites in the outer Van Allen belt. Due to the presence of the high energy Van Allen electrons, the electrostatic potentials acquired by satellites in the Van Allen region may be much larger than for the case of ionospheric satellites. Numerical results for the satellite potential are obtained under the assumption of complete absorption of the incident particles, and it is found that for satellites of the size used thus far, potentials of a few kilovolts can be expected, but that for satellites of larger size, potentials up to several tens of kilovolts can be expected. The effects of secondary electron emission and photoelectron emission are investigated. It is found that secondary electrons will have only a minor effect, but that for some surface materials the effect of photoelectron emission due to solar radiation may completely cancel out the large potentials. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604791

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE THERMODYNAMIC PROPERTIES OF 85% CO₂ AND 15% NITROGEN TO 24000K,

Personal Author(s):

Strahle, Warren C

Report Date:

Sep 1961

Media Count:

88 Page(s)

Report Number(s):

P-2456

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The equilibrium thermodynamic properties of a volumetric mixture of 85% carbon dioxide and 15% nitrogen are presented over the temperature and pressure ranges of from 1000K to 24000K and 0.0001 to 100 atm, respectively. It is expected that the prime use of these properties will be in preliminary design studies for probes to enter the Venus atmosphere. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605780

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPERATIONS USEFUL FOR SIMILARITY-INVARIANT PATTERN RECOGNITION,

Personal Author(s):

Doyle,W

Report Date:

Sep 1961

Media Count:

1 Page(s)

Report Number(s):

P-2449

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some ideas for position- and size-invariant two-dimensional pattern recognition are discussed. They lead, in some cases, to easily mechanized operations. An application to detection of straight lines is proposed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605782

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RESOLUTION OF COGNITIVE CONFLICT UNDER UNCERTAINTY, A CRITIQUE,

Personal Author(s):

Jordan,Nehemiah

Report Date:

Sep 1961

Media Count:

1 Page(s)

Report Number(s):

P-2442

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An article appearing in the May 1961 issue of Human Relations, by Zajonc and Burnstein is reviewed. Two experiments on the resolution of cognitive conflict under uncertainty are discussed. Both experiments concern the resolution of conflicts, of discrepancies, between prior information or knowledge and new information in the form of messages. In both experiments the degree of certainty of the prior information is varied, i.e., is the independent variable.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605779

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANYONE FOR THE MOON,

Personal Author(s):

Williams,J D

Report Date:

Sep 1961

Media Count:

8 Page(s)

Report Number(s):

P-2383

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The expedition to the moon, now being attempted by the United States, is discussed. Costs are considered as well as national prestige, the benefits of scientific investigation, and the conceivable consequences of a possible failure.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0617266

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON STABILITY IN DETERRENT RACES.

Descriptive Note:

Revised ed.,

Personal Author(s):

Hoag, Malcolm W

Report Date:

Sep 1961

Media Count:

43 Page(s)

Report Number(s):

P-2188-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605784

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PARTIALLY CONTROLLABLE RANDOM WALK,

Personal Author(s):

Cover, T M

Report Date:

Sep 1961

Media Count:

1 Page(s)

Report Number(s):

P-2450

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper deals with an almost uncontrollable process which will be termed a partially controlled random walk. A particle performs a random walk on an interval (o, a) . A utility $U_{sub o}(x)$ is associated with each position x on (o, a) . The amplitude of the random walk is controllable at each stage. The process is termed almost uncontrollable because the random walk is assumed to have zero mean. Gambling terminology is used because of its extensive vocabulary, but the utility functions $U_{sub o}(x)$ can be nonmonotonic and discontinuous--more general functions than their interpretation as gambling utilities would suggest. This problem may be viewed as a sequence of fair gambles on a nonlinear utility function. It is shown that with certain betting sequences a certain higher utility $U(x)$ can be associated with each point x , where $U(x)$ is now the expected utility at the end of the betting sequence beginning with capital x . An upper bound on $U(x)$ (over all possible infinite betting sequences) will be derived. This maximum expected utility $U(x)$ has a very nice relation to $U_{sub o}(x)$, the actual utility.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605541

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PERCEPTION, COGNITION AND SCIENCE,

Personal Author(s):

Jordan,Nehemiah

Report Date:

Sep 1961

Media Count:

1 Page(s)

Report Number(s):

P-2444

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Brunswik's description of what must take place in the perceptual process is viewed as veridical in that it is independent of existing psychological theories and of epistemological postulates as to how man knows what he knows or as to what science is. Although this description may be found incorrect in the future, it is to be expected that with the increase of factual knowledge and conceptual sophistication many additional details may be added to it. The power of this description is such that it can be used to develop a chain of thought that is in many ways in opposition to Brunswik's assumptions concerning knowledge and science. Such a development is attempted in this paper.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604512

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PATH-INVARIANT COMMA-FREE CODES,

Personal Author(s):

KENDALL,William B

Reed,Irving S

Report Date:

Sep 1961

Media Count:

23 Page(s)

Report Number(s):

P-2377-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper defines a subclass of comma-free codes which has a property called path invariance. Certain path invariant comma-free dictionaries using K symbols to form n-symbol words are developed and their properties are studied. The main advantage of this class of commafree codes lies in the ease of establishing the positions of the divisions between words. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0650439

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) U. S. PRODUCTIVE CAPACITY AVAILABLE FOR INCREASING DEFENSE AND FOREIGN AIR PROCUREMENT.

Personal Author(s):

Pincus,J A

Report Date:

Sep 1961

Media Count:

67 Page(s)

Report Number(s):

RM-2843-PR

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) If, during the next decade, the United States should decide to spend more than it does now on defense and foreign military and economic aid, how much of the increase could come from fuller use of

then-existing capacity, rather than from lower consumption expenditure. This paper tries to answer that question for the national economy, for manufacturing as a whole, and for individual industries upon which defense and foreign aid procurement rely heavily. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0670833

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/670833.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD670833>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE FOREIGN POLICY USES OF THE CHINESE REVOLUTIONARY MODEL

Personal Author(s):

Halpern, A M

Report Date:

28 Aug 1961

Media Count:

30 Page(s)

Report Number(s):

P-2230-1

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The American student of Chinese Communist affairs must rely heavily on the recorded public utterances of representatives of the regime. The interpretation of such data is of course subject to a number of uncertainties. The ways in which public political statements can be used to deceive, to mislead, or to bargain are not always obvious. Even when a statement embodies a real calculation or the speaker's genuine perception of the world, the motive for making it may lie in the passing demands of small scale tactics, or it may be of extreme subjective import to the speaker. The major purpose of this paper has been to explore the contribution of the analysis of overt communication to the understanding of the political processes of a closed society. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606097

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VARIOUS PROPERTIES OF THE POISSON DISTRIBUTION,

Personal Author(s):

Hadley,G F

Whitin,T M

Report Date:

25 Aug 1961

Media Count:

9 Page(s)

Report Number(s):

P-2421

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A table is presented of properties of the Poisson distribution which have been found useful in working with a variety of operational models. In particular the properties proved useful to the authors in obtaining explicit expressions for inventory levels, backorders, and stockout costs under various

assumptions concerning the lead time distribution and penalty functions. Some of the relationships are almost immediately obvious; but were included in the paper for the sake of completeness.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0632400

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE TURBULENT BOUNDARY LAYER IN A COMPRESSIBLE FLUID,

Personal Author(s):

Coles,Donald E

Report Date:

22 Aug 1961

Media Count:

106 Page(s)

Report Number(s):

P-2417

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Microfiche only after original copies exhausted. Copies to DDC users only.

Abstract:

(U) The first object of the paper is to develop a transformation which reduces the boundary-layer equations for compressible two-dimensional mean turbulent motion to incompressible form. The second object is to apply this transformation to the special case of the adiabatic turbulent boundary layer on a smooth wall. The transformation represents at every stage a genuine kinematic and dynamic correspondence between two real flows, both of which are capable of being observed experimentally. Since the mean pressure and mean velocity can then be measured in either flow, the mean acceleration of the fluid can in principle be determined, and the shearing stress can be adequately and accurately defined as the stress which is necessary to account for this acceleration. This formulation leads to a general transformation valid for laminar or turbulent flow in wakes and boundary layers, without regard

to the state or energy equations or the viscosity law for the compressible fluid, and without regard to the boundary conditions on surface pressure or temperature in the event that a surface is involved.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA032223

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/a032223.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/ADA032223>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Economic Recovery from the Effects of Thermonuclear War

Personal Author(s):

Winter, Jr, Sidney G

Report Date:

22 Aug 1961

Media Count:

33 Page(s)

Report Number(s):

RAND-P-2416

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The author presents his views on the subject: If the United States is involved in a thermonuclear war, can population losses be held essentially to those caused directly by the war, and can the nation recover its prewar achievements in political organization, human welfare, and production.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0673703

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/673703.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD673703>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROBLEMS OF FIRE IN NUCLEAR WARFARE

Personal Author(s):

Hill, Jerald E

Report Date:

21 Aug 1961

Media Count:

36 Page(s)

Report Number(s):

RAND/P-2414

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606096

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROBABILITY AND STATISTICS IN SYSTEMS WORK,

Personal Author(s):

Reed, I S

Report Date:

16 Aug 1961

Media Count:

1 Page(s)

Report Number(s):

P-2407

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper features the application of statistics and probability to systems work by way of an example. The system chosen to illustrate such applications of statistical design is a particular statistical decision mechanism, called the mechanized radar observer. The particular fields of statistics and probability which were used in the design of this machine are discussed herein. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604511

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USE OF QUADRATIC PROGRAMMING IN STOCHASTIC LINEAR PROGRAMMING,

Personal Author(s):

Beale,E M L

Report Date:

15 Aug 1961

Media Count:

26 Page(s)

Report Number(s):

P-2404

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents a simple method of allowing for uncertainties in the constant terms (i.e. right hand sides) of a linear programming problem, and hence producing realistic 'safety margins' in the solution. This is done by fitting a mixture of uniform distributions to the assumed distributions of these right hand sides, and using a particular quadratic programming algorithm. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0609756

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRANSPORTATION FOR FUTURE URBAN COMMUNITIES: A STUDY PROSPECTUS.

Report Date:

10 Aug 1961

Media Count:

52 Page(s)

Report Number(s):

RM-2824-FF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A tentative procedure for a study of urban transportation is outlined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0263219

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE SOLUTION OF TWO-STAGE LINEAR PROGRAMS UNDER UNCERTAINTY. NOTES ON LINEAR PROGRAMMING AND EXTENSIONS. PART 55

Personal Author(s):

DANTZIG,GEORGE B

MADANSKY,ALBERT

Report Date:

10 Aug 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A possible method for compensating for uncertainty in linear-programming problems is to replace the random elements by expected values or by pessimistic estimates of these values, or to recast the problem into a two-stage program so that, in the second stage, one can compensate for inaccuracies in the first stage. The purpose of this analysis is to examine the last of these methods in detail. More precisely, it investigates the conditions under which the first-stage decisions are optimal. In addition, formulas for using various existing computational algorithms to obtain an optimal solution are given.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605788

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO ELECTRONIC COMPUTERS, CHAPTER I: INTRODUCTION TO COMPUTERS,

Personal Author(s):

Gruenberger, F J

McCracken, D D

Report Date:

10 Aug 1961

Media Count:

1 Page(s)

Report Number(s):

P-2231-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An electronic computer, a device which can accept information, store it, process it, and present the results of the processing in some acceptable form is introduced.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604532

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETECTION OF NUCLEAR EXPLOSIONS,

Personal Author(s):

LATTER,R

Herbst,R F

Watson,K M

Report Date:

02 Aug 1961

Media Count:

108 Page(s)

Report Number(s):

P-2399

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Geneva negotiations on the discontinuance of nuclear weapon tests have focused considerable scientific attention on the problem of detecting nuclear explosions. The present paper reviews the detection problem broadly, and describes in detail some of the more important aspects of the problem. There has been no attempt at completeness, and no attempt has been made to evaluate the specific detection capabilities of the international detection system which was discussed at the Geneva political negotiations. Detection will be discussed separately for each environment in which explosions could be undertaken --- in the atmosphere, underwater, underground, and in space. The underground and space environments will be treated in greater detail than the atmosphere and underwater environments, since the more difficult problems for detection arise in the case of underground and space nuclear explosions.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0264424

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE HYPERSONIC TRAIL IN THE EXPANSION-CONDUCTION REGION

Personal Author(s):

LYKLOUDIS,PAUL S

Report Date:
Aug 1961
Media Count:
1 Page(s)
Report Number(s):
RM-2818-PR
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0266147
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) INFLUENCE OF RESOURCE AND POLICY CHANGES ON AIRCRAFT CAPABILITIES
Personal Author(s):
BELL, CHAUNCEY F
Report Date:
Aug 1961
Media Count:
49 Page(s)
Report Number(s):
R-382
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The principal method employed to examine effects of changes in policies and resources was a machine-simulation technique developed in the course of research. The outputs of the simulation were

checked against Air Force experience to ensure that they are reasonably pertinent AND ACCURATE. A hypothetical squadron of aircraft is used as the vehicle for studying the effects of different policies and resources on operational capability. Operational policy changes and their effect on capability are systematically examined. A similar examination then follows, dealing with maintenance policies and changes in numbers of aircraft in an organization, numbers of direct maintenance personnel in the squadron, and quantities of aerospace ground equipment and spare parts. The maintenance personnel are considered in terms of work priority, skill levels and cross-training. Maintenance-management responsiveness is also discussed. The study considers the problem of selecting particular policies and resources in the light of cost and manpower limitations as well as strategic and tactical matters. Finally, it deals with problems of new weapon systems phasing in and those phasing out. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606880

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COMPUTATION OF OBLIQUE SHOCK WAVE CHARACTERISTICS FOR REAL GASES,

Personal Author(s):

Strahle, W C

Report Date:

Aug 1961

Media Count:

1 Page(s)

Report Number(s):

P-2436

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method is presented whereby oblique shock wave data for real gases may be readily obtained from real gas normal shock wave data corresponding to the same upstream thermodynamic state. Although such solutions are well known for perfect gases there appears to be no method available at this time to account for real gas effects. This method is only useful when the flow deflection angle is the

specified parameter instead of the wave inclination angle. There is no restriction to any gas composition since the physics of the problem are completely contained in the normal shock characteristics. It is expected that primary use of this method will be found in the study of vehicles for entry into planetary atmospheres. Because of the present uncertainty of the characteristics of any of the planetary atmospheres it is not economically justifiable to compute oblique shock charts for every conceivable model atmosphere. However, to even begin consideration of an entry vehicle requires that some normal shock computations be made. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0264422

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PARAMETRIC STUDY OF CERTAIN LOW-MOLECULAR-WEIGHT COMPOUNDS AS NUCLEAR ROCKET PROPELLANTS, V. METHANE

Personal Author(s):

KRIEGER, F J

Report Date:

Aug 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A parametric investigation was made of a series of low-molecular-weight, high-hydrogen-content compounds as propellants for nuclear-powered rockets. A two-part computational program was carried out for CH₄; the results are presented in both tabular and graphic form. The results of the first part of the program are presented in static form, that is, by the conventional Mollier diagram, in which specific enthalpy is plotted against specific entropy, with cross plots of temperature, pressure, and molecular weight. The results of the second part of the program are presented in dynamic form by a series of diagrams in which specific impulse is plotted against pressure, with cross plots of chamber temperature, exhaust temperature, and rocket nozzle area. It was assumed that the propellant gas, starting with a

nonzero chamber velocity, maintained instantaneous chemical equilibrium composition as it expanded isentropically through a de Laval nozzle. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605777

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIMPLEST IMBEDDINGS OF THE COMPLETE 12 GRAPH,

Personal Author(s):

Youngs,J W T

Report Date:

Aug 1961

Media Count:

8 Page(s)

Report Number(s):

P-2426

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605778

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REMARKS ON THE GENUS OF A COMPLETE GRAPH,

Personal Author(s):
Youngs,J W T
Report Date:
Aug 1961
Media Count:
8 Page(s)
Report Number(s):
P-2428
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0417104
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON LOCAL WAR DOCTRINE,
Personal Author(s):
Hoag,Malcolm W
Report Date:
Aug 1961
Media Count:
26 Page(s)
Report Number(s):
P2433
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604374

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STATUS PREDICTION OF SCHEDULED EQUIPMENT,

Personal Author(s):

Johnson,Robert E

Marks,Bernard J

Report Date:

Aug 1961

Media Count:

38 Page(s)

Report Number(s):

P-2435

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper describes a method of predicting the status of equipment and an experiment that was performed in order to gain experience with the method. In the prediction model, the movement of units of equipment from one state to another is governed not only by the transition probabilities of a Markov chain, but also by a control process that is called 'scheduling'. In scheduling, reassignments of equipment from certain states to others are planned for various future times. Because the number of units actually available for reassignment is a random variable, 'expected reassignments' are used in determining equipment status at each successive stage in the prediction process. Expected reassignments are used to modify equipment status at the beginning of the period and then the transition probabilities of a Markov chain are used to determine the status of equipment at the end of the period. Using the resulting predictions, the decision-maker is in a position to evaluate the future performance of the system and adjust his schedule accordingly. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606326

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/606326.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD606326>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ECOLOGICAL PROBLEMS AND POSTWAR RECUPERATION: A PRELIMINARY SURVEY FROM THE CIVIL DEFENSE VIEWPOINT

Descriptive Note:

Research Memo.

Personal Author(s):

Mitchell, H H

Report Date:

Aug 1961

Media Count:

38 Page(s)

Report Number(s):

RAND-RM-2801-PR

XC-USAF

Contract Number:

AF-49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This document calls attention to the need for assessing and solving ecological problems in the post-attack environment as an integral part of Civil Defense. Basic ecological principles involving food chain relationships, climax growth, biological and environmental relationship, and land management are considered. The large-scale damage due to fire, drought, flood and other things has already presented the world with problems of reconstruction and reconstitution of biotic communities which are similar to those envisioned in the post-attack environment. The only qualitatively new element in the post-attack situation will be the effects of radiation. The available information on this subject is summarized and the need for extensive further research is pointed out.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616369

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PARAMETER-FREE AND NONPARAMETRIC TOLERANCE LIMITS: THE EXPONENTIAL CASE.

Descriptive Note:

Revised ed.,

Personal Author(s):

Goodman,Leo A

Madansky,Albert

Report Date:

01 Aug 1961

Media Count:

40 Page(s)

Report Number(s):

P-1806-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Exact parameter-free tolerance intervals based on the first r ordered observations from a sample of size n from an exponential distribution are developed. Various criteria for goodness of tolerance intervals are examined, and certain optimum properties of these intervals are demonstrated. The asymptotic behavior of these intervals is studied. Comparisons are made between these intervals and nonparametric tolerance intervals. Finally, the effect of assuming an exponential distribution, when in fact the distribution is a mixture of two exponentials, is discussed briefly. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604373

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME CONNECTIONS BETWEEN ECONOMIC AND MILITARY ASSISTANCE PROGRAMS IN
UNDERDEVELOPED AREAS,

Personal Author(s):

Wolf, Charles , Jr

Report Date:

01 Aug 1961

Media Count:

13 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Where there are differences or conflicts between economic and military aid, they are often more complex than was, for instance, suggested by a question recently asked in a Congressional Hearing on foreign aid, as to whether guns or jobs are a surer route to stability in the underdeveloped areas. Three connections between economic and military aid as illustrative of this general point are explored. The first connection arises from the character of U. S. objectives in undertaking aid programs in underdeveloped countries. The second is concerned with the role of nonmilitary objectives and criteria in military aid decision-making; and the third connection concerns the problem of incentives for recruiting topquality personnel to serve in both economic and military aid programs. The first and second are closely related points; the third, clearly, is quite independent.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

ADD518955

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Convergence Problem for Differential Games.

Descriptive Note:

Journal article,

Personal Author(s):

Fleming, Wendell H

Report Date:

Aug 1961

Media Count:

15 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Distribution Statement:

Published in: Journal of Mathematical Analysis and Applications, v3 n1 p102-116 Aug 61. No copies furnished by DDC/NTIS or GACIAC.

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0646719

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/646719.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD646719>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RISK, AMBIGUITY, AND THE SAVAGE AXIOMS

Personal Author(s):

Ellsberg, Daniel

Report Date:

Aug 1961

Media Count:

43 Page(s)

Report Number(s):

RAND-P-2173

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) A class of choice-situations is indicated in which many otherwise reasonable people neither wish nor tend to conform to the Savage postulates, nor to the other axiom sets that have been devised.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0261027

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME RESULTS ON NEW CLASSES OF MATCHED FILTERS

Personal Author(s):

MIDDLETON,D

Report Date:

12 Jul 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A new class of more advanced filters is examined for which the design criterion is the automatic decision process that occurs when the signals are detected or measured in noise. For example, in the detection of a radar signal the process might involve deciding whether or not a target is present, or it might involve measuring the signal in the sense of determining the position or velocity of a radar target. It is shown how a new class of filters which have optimal properties is conceived theoretically, and the approach is indicated to their design and construction for actual use. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0636037

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MINIMAL K-ARC-CONNECTED GRAPHS.

Personal Author(s):

FULKERSON, D R

Shapley, L S

Report Date:

12 Jul 1961

Media Count:

14 Page(s)

Report Number(s):

P-2371

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A linear graph is k-arc-connected if it is necessary to remove at least k arcs in order to disconnect the graph. This paper solves the problem of determining the fewest number of arcs required in a k-arc-connected graph on n nodes by describing constructions that produce such graphs having $kn/2$ arcs (for

kn even) or $kn + 1/2$ arcs (for kn odd). These results have application to the practical problem of synthesizing minimum cost, 'k-reliable' communication networks. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0636174

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYSIS OF THE FORMATION OF METEOR CRATER, ARIZONA: A PRELIMINARY REPORT.

Personal Author(s):

Bjork, R L

Report Date:

06 Jul 1961

Media Count:

27 Page(s)

Report Number(s):

P-2370

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A theoretical study is made of the cratering process accompanying the impact of a 12,000 ton iron projectile on a semi-infinite half space of soft rock at a velocity of 30 km/sec. The constituents and velocity approximate those involved in the formation of Meteor Crater, Arizona. The assumption is made that the process is hydrodynamic in nature, since the pressures generated so far exceed the strengths of the materials. At these high pressures, the compressibilities of the materials must be taken into account with the result that shocks are generated. The motion is solved by numerical means, and graphs showing details of the motion are presented. The conclusion in this preliminary report is that the meteorite had a mass of between 30,000 and 194,000 tons, the range being due to the uncertainty in the impact velocity. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0260770

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ATOMIC-HYDROGEN GUN

Personal Author(s):

BJORK,R L

Report Date:

05 Jul 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Calculations are presented which indicate that light-gas guns powered by electrical discharges may be expected to achieve substantially higher projectile velocities than may be obtained by any present laboratory gun. The thermodynamic properties of compressed, high-temperature hydrogen are calculated and presented, and it is found that for isentropic expansions in a region representative of gun operation, the gas closely follows an equation of state, even though considerable dissociation occurs. For the same gun parameter and gas temperature, hydrogen was found to give much higher muzzle velocities than helium. Using values commensurate with the current state of the art, it was estimated that such a gun could deliver about 10 km/sec and would have a large potential for future improvement.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0665891

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PERFORMANCE OF A READING TASK BY AN ELEMENTARY PERCEIVING AND MEMORIZING PROGRAM,

Personal Author(s):

Feigenbaum,Edward A

Simon,Herbert A

Report Date:

05 Jul 1961

Media Count:

15 Page(s)

Report Number(s):

P-2358

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some experiments are reported which show that the mechanisms postulated in EPAM for the rote memory tasks are adequate for simulating, at least macroscopically, the processes employed by human beings in acquiring the ability to read and understand printed words. A summary description of the EPAM program is provided mentioning the main processes it uses in rote memory tasks. The manner in which these processes are used in learning to read is described.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0260560

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A VARIATIONAL APPROACH TO DIFFERENTIAL GAMES

Personal Author(s):

BERKOVITZ,L D

Report Date:

30 Jun 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A class of differential games having pure strategy solutions is investigated by means of results and techniques from the calculus of variations. These games are related to two Bolza problems with differential inequalities as added side constraints. Necessary conditions that must hold along an optimal path are derived from the theory of the related Bolza problems. These conditions are (1) a multiplier rule, together with transversality conditions and jump conditions, (2) a local min-max condition that is related to the Weierstrass condition, and (3) an analogue of the Clebsch condition. The continuity and differentiability properties of the value of the game are derived. It is shown that, wherever the value is differentiable, it satisfies an analogue of the Hamilton-Jacobi equation. Sufficient conditions are given in terms of the notion of a field and of a local min-max condition. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

ADF630439

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Experiments with a Heuristic Compiler,

Personal Author(s):

Simon,Herbert A

Report Date:

30 Jun 1961

Media Count:

86 Page(s)

Report Number(s):

P-2349

SBI-AD-F630 439

Monitor Series:

AD-F630 439

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Distribution Statement:

Announcement only; not available from DTIC. For availability information contact: Rand Corporation, Publications Department, 1700 Main Street, Santa Monica, CA 90406.

Abstract:

(U) This report describes some experiments in constructing a compiler that makes use of heuristic problem-solving techniques such as those incorporated in the General Problem Solver. The experiments were aimed at the dual objectives of throwing light on some of the problems of constructing more powerful programming languages and compilers, and of testing whether the task of writing a computer program can be regarded as a 'problem' in the sense in which that term is used in GPS.

Abstract Classification:

Unclassified

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0636103

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/636103.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD636103>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) WAVE-INDUCED MOTIONS OF A LARGE ROCKET VEHICLE DRIFTING IN A VERTICAL ATTITUDE

Personal Author(s):

Leendertse, J J

Report Date:

29 Jun 1961

Media Count:

44 Page(s)

Report Number(s):

P-2365

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Results are presented of a theoretical and experimental laboratory study of the movements of a large solid-propellant rocket vehicle drifting in a vertical attitude in uniform waves and in the wave environment of the open sea. Measurements were made of the movement in heave and pitch of a 1-120 scale model of a 175-ft long vehicle. Experimentally obtained results compared well with those obtained analytically. It appears that heave and pitch are linear functions of the wave height and nonlinear functions of the wave frequency. Pitch and surge are coupled. On basis of the linear response of the vehicle to uniform waves, statistical features of the response in heave and pitch to ocean waves with a particular spectrum are calculated.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0608316

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF THE ROTATIONAL MOTION OF A BODY DURING RE-ENTRY.

Descriptive Note:

Revised ed.,

Personal Author(s):

Garber,T B

Report Date:

28 Jun 1961

Media Count:

60 Page(s)

Report Number(s):

RM1863-1

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The dynamical equations of motion are formulated for a body during re-entry into the atmosphere. With the assumption that the translational and rotational degrees of freedom may be treated independently, an analysis is undertaken of the oscillatory motion of a re-entry vehicle which is spinning about its longitudinal axis. The influence of the spin rate and the static margin upon the stability of the transient solution of the equations of motion is considered, and it is concluded that satisfactory dynamical behavior of the re-entry body may be anticipated if the static margin of the vehicle is less than zero, the spin rate is in the range 0.5 to 2 radians per second, and the lift curve has a slope equal to or greater than zero. An examination of the precessional and nutational motion of the vehicle is also made, and the effect of initial conditions upon these modes of oscillation is indicated.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0726040

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On the Determination of Occupational Categories in an Organization,

Personal Author(s):

Stoller, David S

Report Date:

27 Jun 1961

Media Count:

11 Page(s)

Report Number(s):

P2362

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses the implication of three types of personnel policies on the number of categories of repairmen. These policies are the following: Policy I: A completely task-oriented personnel policy which assumes in essence that each specialty covers one or more kinds of tasks to perform and that these kinds of tasks do not differ very much over the different specialties; Policy II: A specialty-oriented personnel policy, which assumes in essence that each subsystem of the equipment to be repaired represents a complex task which can only be performed by highly specialized personnel, Policy III: A mixture of the above two policies. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0630885

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NEW APPROACH TO THE DUALITY THEORY OF MATHEMATICAL PROGRAMMING,

Personal Author(s):

Dreyfus, Stuart

Freimer, M

Report Date:

26 Jun 1961

Media Count:

14 Page(s)

Report Number(s):

P-2334

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0654295

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GAME-SIMULATION AND LONG-RANGE PLANNING,

Personal Author(s):

Rauner,R M

Steger,W A

Report Date:

22 Jun 1961

Media Count:

29 Page(s)

Report Number(s):

P-2355

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Game-simulations combine exploratory heuristics with analytical, numerical cost effectiveness comparisons of various system configurations reflecting proposed long-range plans. This report considers the advantages and the limitations of this technique in previous applications for the Air Force. It is believed that the game-simulation technique can find its most useful application in large, system projects that contain the broad phases of research, testing, development, support planning, production, and operations, and that also contain a sizeable management control function. Examples are given.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0260921

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INDUSTRIAL EQUIPMENT SPECTRUM SIGNATURES

Personal Author(s):

MYERS, H A

Report Date:

16 Jun 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A survey is presented of the radiation characteristics (spectrum signatures) of electrical and electronic equipments such as rectifiers, welders, power lines, switching devices, ignition systems, induction heaters, and electric motors. Several equipment signatures were compiled from interference reports, which indicated that some industrial activities radiate strongly enough to cause interference at ranges up to a few miles, and that most of the energy is concentrated in the low-frequency portion of the spectrum. The equipments mentioned were measured at very low frequencies, and the graphs show strong and unique signatures in the SLF and ULF (30 to 3000 c) bands. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0259555

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MINIMUM-WEIGHT PROPORTIONS OF PRESSURE-VESSEL HEADS

Personal Author(s):

HOFFMAN, G A

Report Date:

13 Jun 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Minimum-weight shapes of head closures for cylindrical pressure vessels are derived. Head configurations, weights, and membrane stresses are derived for thin-shell heads of isotropic materials with uniform internal pressure by restricting the knuckle shear stresses to constant values and/or by minimizing the weight of prescribed-shape heads. Torispherical, ellipsoidal, AND CONSTANT-SHEAR-STRESS HEADS WITH CONSTANT AND VARYING THICKNESS ARE INVESTIGATED, WITH CONSTANCY OF ENCLOSED VOLUME AND SUPPORTING STRUCTURE BEING CONSIDERED. This study resulted in certain highly efficient shapes weighing up to 11% less than the corresponding hemispherical capping closure.
(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0676259

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OVERLAPPING TESSELLATED COMMUNICATIONS NETWORKS,

Personal Author(s):

Craig, L J

Reed, I S

Report Date:

13 Jun 1961

Media Count:

20 Page(s)

Report Number(s):

P-2359

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents a philosophy of interconnecting communication networks which have the appearance of overlapping tessellations. The bandwidth requirements for two types of networks was derived--the linear spanning and the inclusive spanning. The efficacy of one network as compared to the other is measured by the additional switching requirements for various spanning doctrines. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0260059

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN OMNIBUS OF BRIEFING PAPERS ON ANALYSIS OF AUTOMATIC CHECKOUT EQUIPMENT AND AIDS TO ITS DESIGN

Personal Author(s):

FIRSTMAN,S I

BARBOUR,A A

Report Date:

12 Jun 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Contents: Automatic checkout equipment: a summary report of RAND's study Basic considerations of automatic testing Economic-physical trade-offs in missile system design for readiness Readiness testing design criteria Ballistic missile prelaunch checkout Rules for effective automatic fault location Weapon system cost implications of automatic checkout equipment and the pros and cons of its standardization Manpower implications of test automation Human factors considerations in the design of automated checkout equipment Automatic checkoutSan Diego, Calif. DEVELOPMENT OF HIGH

TEMPERATURE RADIANT GAS BRAZING METHOD FOR HONEYCOMB PANELS. Final technical engineering rept. 5 Dec 588 Dec 60, by W. C. Troy. May 61, 227p. incl. illus. tables. (Contract AF 33(600)38317, Proj. 7-661) (ASD TEQUIPMENT--ITS IMPLICATIONS FOR DATA SYSTEM DESIGN

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604578

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HUMAN FACTORS IN SYSTEMS RESEARCH,

Personal Author(s):

Haythorn,W W

Report Date:

07 Jun 1961

Media Count:

33 Page(s)

Report Number(s):

P-2337

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A number of systems research efforts in which human factors considerations play key roles are described with a view to illustrating techniques for examining human factors problems in a broad systems context.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

AD0634195

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RECENT DEVELOPMENTS IN NONLINEAR PROGRAMMING. PART II,

Personal Author(s):

Wolfe, Philip

Report Date:

06 Jun 1961

Media Count:

34 Page(s)

Report Number(s):

P-2333-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Distribution Statement:

Availability: Hard copy available from University of California Press, Los Angeles, Calif., \$2.00.

Abstract:

(U) This paper is a sequel to P-2063. The two papers constitute a survey of the basic features of the principal current proposals for the computational solution of nonlinear programming problems. The first paper discussed the gradient methods; the present paper presents those procedures based essentially on the simplex method for linear programming. (Author)

Abstract Classification:

Unclassified

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0638240

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF THE MILITARY COMPTROLLER IN DEFENSE MANAGEMENT.

Personal Author(s):

Novick,David

Report Date:

06 Jun 1961

Media Count:

11 Page(s)

Report Number(s):

P-2336

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The comptroller's responsibility is to see to it that those who plan and execute decisions have the information necessary to their jobs. His responsibility begins and ends with the design and maintenance of the information system built around this program concept. The Secretary of Defense, Joint Chiefs, Department Secretaries, and Service Chiefs use the information to develop sound plans, assure the means for integrated execution, and provide for appropriate revision when necessary.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0639563

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MOTIVATIONAL PROBLEMS IN HUMAN-COMPUTER OPERATIONS.

Personal Author(s):

Jordan,Nehemiah

Report Date:

05 Jun 1961

Media Count:

13 Page(s)
Report Number(s):
P-2332
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0267434
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) MILITARY FORCE AND SOVIET GOALS
Personal Author(s):
DINERSTEIN,HERBERT S
Report Date:
02 Jun 1961
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Methods whereby the Soviets use military power to further political ends are examined. The methods take three principal forms: (1) demonstrations of the existence of military power; (2) threats to use force under circumstances vaguely defined; and (3) the sale of conventional weapons is used to intimidate our NATO allies into considering exclusion of nuclear weapons from their territories. In this connection, Berlin poses a dilemma for the Soviets: pressure on Berlin enhances the attractiveness of NATO protection, while relative passivity encourages resistance to Soviet demands. As for the sale of weapons, the purchaser could be expected to use them militarily or politically against a member of NATO, CENTO, or SEATO. Aid to emergent nations is considered to be a blow to Western imperialism and therefore a means of weakening capitalism and fostering socialism-and ultimately communism. This review of Soviet employment of power during the Cold War leads to the conclusion that nuclear

weapons have not cancelled themselves out (as some claim). Even without war, it is plain that weapons of all kinds will continue to play an important role in international life. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0627207

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON PROBLEMS CONCERNING THE LEGAL STATUS OF OUTER SPACE,

Personal Author(s):

Tse-Yung,Liu

Report Date:

02 Jun 1961

Media Count:

25 Page(s)

Report Number(s):

T-141

TT-66-60387

Contract Number:

AF49(638)-700

Monitor Series:

66-60387

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The scientific development with regard to space missiles (intercontinental ballistic missile) and man-made satellites has today introduced a new era in the advancement of man. The pattern of the use of outer space by scientific means will undoubtedly unfold in a context of conditions which will be certain to effect the law of space as it develops over the years. This has brought about the present situation with respect to international law of outer space. The concept of outer space law and its various legal interpretations have also become matters of international significance. However, the aggressive attempt of the United States imperialists in regard to the possible use of outer space has further created

aggravated conflicts between two camps, namely, whether the exploration of outer space is for 'peaceful purposes' or for 'military purposes.' (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0257938

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THEORY OF IONIZED TRAILS FOR BODIES AT HYPERSONIC SPEEDS

Personal Author(s):

LYKOUDIS,P S

Report Date:

29 May 1961

Media Count:

1 Page(s)

Report Number(s):

RM-2682

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The characteristics of the gaseous trail remaining behind a body moving through the atmosphere at hypersonic speeds are discussed. Means are sought for ascertaining those variables that can be measured and used to predict the characteristics of the body causing the trail, essentially its shape and weight. In the case of thermodynamic equilibrium, a universal solution is found for the velocity and enthalpy distributions at a station behind the body where the pressure has reached its ambient free-stream value. This solution is given in terms of the coordinate defining the shape of the bow shock wave. The nondimensional velocity and enthalpy profiles depend strongly on the drag coefficient alone. The Thermal-conduction part of the trail is also studied. An analytic solution is found for the case of variable thermal conductivity. The length of the trail based on a minimum ionization level is calculated at different altitudes for an illustrative re-entry. Within a good approximation this length is directly

proportional to the local atmospheric density, to the drag coefficient, and to the objects's cross-sectional area, for a constant flight velocity and for a relatively blunt body with boundary-layer effects neglected. The influence of the trailing shock on the conduction part of the trail is discussed. A preliminary study is also made of the trail under chemically frozen conditions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0665125

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTER SIMULATION OF HUMAN THINKING AND PROBLEM SOLVING,

Personal Author(s):

Newell,Allen

Simon,H A

Report Date:

29 May 1961

Media Count:

31 Page(s)

Report Number(s):

P-2312

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

20 - JOURNAL ARTICLES; DTIC USERS ONLY

Distribution Statement:

Availability: Published in Copyright Journal.

Abstract:

(U) The report describes a computer program called the General Problem Solver. It is called 'general' because it will accept as tasks all problems that can be put in a specified, but fairly general, form, and because the methods it employs make no specific reference to the subject matter of the particular problem it is solving. The General Problem Solver is a system of methods--believed to be those commonly possessed by intelligent college students--that turn out to be helpful in many situations

where a person confronts problems for which he does not possess special methods of attack. A discussion is also given of speech acquisition.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0257935

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EXPERIMENT IN AIRCRAFT STATUS PREDICTION

Personal Author(s):

JOHNSON,ROBERT E

Report Date:

24 May 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method of aircraft status prediction is described and an experiment based on certain Air Force data is presented. One aspect of weapon system management is the ability to control hour-to-hour and day-to-day readiness levels for aircraft and missiles. This analysis tries to develop a method for prediction purposes, one that would be useful for periods of hours rather than days. The author relies on a Markov chain method, finding it better than simple reliance on either the present status of the unit's aircraft or on some average status pattern. The method takes advantage of information about the future provided by (1) schedules relating to flying and to periodic maintenance, (2) historical data, and (3) current status information. It is suggested that certain systems now under development would be benefited by taking into account the needs of status prediction at such times as the systems become operational. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604375

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CIVIL ENGINEERING CHALLENGE. AN OUTSIDER'S VIEW OF AIR FORCE CIVIL ENGINEERING,

Personal Author(s):

Brode,H L

Report Date:

24 May 1961

Media Count:

22 Page(s)

Report Number(s):

P-2323

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A set of admonitions is aimed at those military officers responsible for the construction and maintenance of structures in support of weapon systems. The need for early attention to the new and special construction requirements of developing systems is illustrated. The consequences of lack of attention to detail and the exacting demands that are placed on the expert in uniform for supervision of design and conduct of research are emphasized. Some special problems in this area of military engineering are identified and some suggestions for improvement are alluded to. Successful military engineering relies heavily on competent civil engineering, so that much of the admonishments here are equally appropriately directed to those civilian engineers, both commercial and academic, engaged in these same military programs. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA484029

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/a484029.pdf

Size: 599 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/ADA484029>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Forgetting in an Association Memory

Descriptive Note:

Conference paper

Personal Author(s):

Feigenbaum, Edward A

Simon, Herbert A

Report Date:

24 May 1961

Media Count:

14 Page(s)

Report Number(s):

RAND-P-2311

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A model of association memory, the EPAM (Elementary Perceiver and Memorizer) system is a learning system, a computer simulation of human verbal learning processes. No stored information in this memory is ever physically destroyed. Yet the behavior which we normally call forgetting occurs because of a loss of access (temporary or permanent) to information stored in a growing net of associations. In this system, forgetting occurs as a direct consequence of normal learning processes (i.e., forgetting is the result of the interference of items later learned with items learned earlier) without the postulation of a separate mechanism. Two experiments with human verbal learning are discussed, and the interference phenomena are explained in terms of the EPAM model.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0257937

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SPARE PARTS INVENTORIES FOR NATO

Personal Author(s):

MENDERSHAUSEN,HORST

Report Date:

23 May 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This study defines a number of features which ought to be possessed by jointly financed spare parts inventories operated for weapon systems common to NATO countries. It attempts to show the important problems that such an undertaking would face and systematically suggests solutions to them. The present study urges that the participating countries should build, in the NATO Supply Center, joint inventories for prompt service, and commit themselves to using these inventories fully. To achieve best results, materiel should be available to the users on requisition; certain procurement functions should be delegated by the countries; weapon system partnerships should be developed; and both purposes and inventory ranges clearly defined. Costs should be shared on a planned and equitable basis (outlined in the study). (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0618957

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME LIMITATIONS OF AUTOMATIC TEST EQUIPMENT,

Personal Author(s):

Firstman,Sidney I

Report Date:

22 May 1961

Media Count:

8 Page(s)

Report Number(s):

P-2319

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Four categories of automatic test equipment (ATE) limitations are discussed: those surrounding automatic testing per se, those most closely associated with ATEprime equipment interactions, those associated with the ATE operating in its environment, and those concerned primarily with man-machine activities.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0271753

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ASPECTS OF SYNCHRONOUS COMMUNICATION SATELLITES

Personal Author(s):

FELDMAN,N E

Report Date:

18 May 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Before 1980, satellites will probably be a well-established means for point-to-point communication on earth. A wide variety of passive and active satellite systems are being studied, and some studies are supplemented by experimental programs. The active systems seem more promising because of their larger capacity for a given weight in orbit with a given investment in ground terminals. Of the active systems, that which offers the greatest capacity is the geocentric stabilized station-keeping satellite in a synchronous equatorial orbit. This satellite is in direct line of sight of almost half of the earth's surface. The orbit is unique in that the satellite may have little motion about the line of sight; this may permit the use of large stationary ground antennas, in addition to the directive antennas on the satellite which cover the visible earth. This report concerns the satellite design and payload weight required to provide a given channel capacity. It is oriented toward commercial point-to-point communication, where costs dictate conservative techniques. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616241

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/616241.pdf

Size: 426 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD616241>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN INTRODUCTION TO AUTOMATED PRODUCTION CONTROL SYSTEM

Personal Author(s):

Hill, L S

Report Date:

17 May 1961

Media Count:

14 Page(s)

Report Number(s):

RAND-P-2295

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) It is the purpose of the paper to present in abridged form a synthesized procedure for control of production using punched-card methods. The system may be considered a framework for application to any manufacturing enterprise engaged in the fabrication and assembly of parts, regardless of product. Machines are used to record and coordinate all paperwork involved in manufacturing from time of raw material receipt through transformation into finished product. A collateral objective of this presentation is to indicate that mechanization of the production control system is a logical role for the industrial engineer.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0627203

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND LINEAR PREDICTION THEORY,

Personal Author(s):

Bellman, Richard

Report Date:

16 May 1961

Media Count:

10 Page(s)

Report Number(s):

P-2308

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The application is considered of the theory of dynamic programming to a discrete form of the linear prediction problem, that of minimizing over $u_{sub k}$ a given quadratic form.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0782780

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Allocation of Functions between Man and Machines in Automated Systems,

Personal Author(s):

Jordan, Nehemiah

Report Date:

16 May 1961

Media Count:

12 Page(s)

Report Number(s):

P-2310

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The report postulates that men are good at doing that which machines are not good at doing and machines are good at doing that which men are not good at doing. Thus men and machines are not comparable, but complementary, and the term 'allocation of tasks to men and machine' becomes meaningless. Rather a task must be done by men and machines.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0613667

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAINTENANCE SCHEDULING DECISIONS AND THE IMPORTANCE OF INFORMATION,

Personal Author(s):

HAYTHORN,W W

Report Date:

09 May 1961

Media Count:

26 Page(s)

Report Number(s):

P-2302

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Logistics Systems Laboratory at RAND built a simulated laboratory version of a ballistic missile wing beginning in the spring of 1958 before any ballistic missile squadrons existed in the Air Force. The system was staffed with senior Air Force officers being transitioned from aircraft to missiles. Two important human factors considerations in the study were the role of maintenance management in maintaining missile alert and the requirements for maintenance personnel in accomplishing the scheduled and unscheduled maintenance necessary to assure a high degree of alert. An advanced on-line information system was provided to facilitate management decisions. A procedure for estimating maintenance personnel requirements by Air Force specialty code, using information regarding the reliability of the hardware under a variety of conditions and the possible operational and maintenance policies to be adopted, was developed. These two aspects of the study will be described as will their impact on overall system cost and effectiveness. The application of the information system and the utilization of the maintenance personnel requirements estimation technique were instrumental in increasing missile alert status by approximately 15 per cent and reducing total system cost by like amount. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0668627

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/668627.pdf

Size: 563 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MATHEMATICAL EXPERIMENTATION AND BIOLOGICAL RESEARCH

Personal Author(s):

Bellman, Richard

Report Date:

08 May 1961

Media Count:

15 Page(s)

Report Number(s):

RAND-P-2300

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

20 - JOURNAL ARTICLES; DTIC USERS ONLY

Distribution Statement:

Availability: To be published in the Proceedings of the Atlantic City Symposium on Mathematical Methods in Biology and Medicine.

Abstract:

(U) The possibility of the application of mathematical techniques to the biomedical research field is discussed. A great deal has been gained from this in the past and the introduction of the digital computer greatly increases the promise of the future. One of the functions of the mathematician

interested in the areas of biology and medicine is to prove that there are significant and intriguing mathematical questions in these new fields and by example to show the biologist and medical researcher that he can contribute to their problems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0256872

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE KHRUSHCHEV SUCCESSION PROBLEM

Personal Author(s):

RUSH,MYRON

Report Date:

01 May 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An assessment of the question of Soviet succession in Khrushchev's 68th year, the fourth year of his rule. The study indicates that a succession crisis is inevitable when Khrushchev ceases to exercise dictatorial powers. The depth of the crisis, however, will depend on certain circumstances at the time. Only if the Soviet regime is seriously weakened by such a crisis is it likely that Soviet foreign policy will be redirected from its primary aim of subverting the West and achieving a communist world order. Moreover, while economic and social progress poses a serious problem for the regime and is certain to have important political consequences, it cannot, in the author's view, change the regime's totalitarian character in the years ahead unless it is seriously weakened by a succession crisis. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0282517

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE KHRUSHCHEV SUCCESSION PROBLEM

Personal Author(s):

RUSH,M

Report Date:

25 Apr 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Consideration is given to the economic and social progress in the Soviet society as a serious problem for the regime that is certain to have important political consequences. Progress cannot in the next decade change the regime's totalitarian character unless it is seriously weakened by a succession crisis. In addition, a third condition is necessary. Unless the West succeeds in checking Soviet expansion, the regime may be able to preserve itself unchanged by capitalizing on its achievements on the world scene. The Khrushchev succession crisis will not save the West; it can only help the West to save itself. A general theory about the succession problem in the Soviet system is presented. It is illustrated and elaborated by a short analytical account of the crisis brought on by Stalin's death. The theory is then applied to the forthcoming Khrushchev succession crisis. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0634797

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/634797.pdf

Size: 496 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD634797>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) UTILIZATION OF SOCIAL RESEARCH IN SHAPING POLICY DECISIONS

Personal Author(s):

Kecshemeti, P

Report Date:

24 Apr 1961

Media Count:

16 Page(s)

Report Number(s):

P-2289

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The report presents three ways in which scientific theory and research can be used for the purposes of formulating and informing governmental policy. One may be called the 'discipline' approach: experts versed in a discipline draw upon the existing body of knowledge (including recent discoveries) in generating policy-relevant advice. This approach is reflected, as a rule, in the policy application of the older, mature, well-developed sciences, including economics. The second variant of policy utilization of research may be called the 'project' approach: here new scientific knowledge is being acquired with a practical goal in mind. This approach is offer the only one available to workers in the less well-developed sciences, including the social sciences other than economics. The third approach is an indirect and informal one. Governmental policy is being influenced, in ways that are hard to specify, by scientific theories and analyses that become part of the general culture and exert an educational influence upon groups and people directly participating in policy-making.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0612429

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC GROWTH AND SOVIET-AMERICAN RIVALRY,

Personal Author(s):

BECKER, Abraham S

Report Date:

21 Apr 1961

Media Count:

19 Page(s)

Report Number(s):

P-2286

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion is presented on various aspects of the function in the cold war of the U.S. - U.S.S.R. rivalry in economic power and growth.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0432336

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CRITERIA FOR THE DESIGN AND USE OF AUTOMATED MISSILE GROUND EQUIPMENT TO IMPROVE MISSILE READINESS,

Personal Author(s):

Brom,Joseph R

Report Date:

20 Apr 1961

Media Count:

29 Page(s)

Contract Number:

P2269

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) One part of an overall ICBM weapon system problem, that of objective criteria for the design and use of automatic checkout equipment is discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0257936

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) D-Layer Ionization Loss Rates.

Personal Author(s):

CRAIN,C M

Report Date:

14 Apr 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Certain ionization phenomena are examined in the region of the earth's atmosphere from about 50 to 90 kilometers, the D-layer. The concentration of electrons in this region tends to change with the

incidence of solar radiation, being greatest in the daytime and falling off during the nighttime or during solar eclipses. Factors in this process are rates of attachment and detachment of electrons to molecules of oxygen (and possibly water vapor) and recombination rates of ions AND ELECTRONS. The ionization effects attributable to cosmic radiation are also examined. As a study in the basic physics of the upper atmosphere, this analysis provides part of the background for investigations of the effects of high altitude nuclear explosions on radio communications. It is thus tied in with research leading to improved methods of post-attack command and control. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

ADF630441

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Why We Cannot Build 'Thinking Machines' (At Least at Present),

Personal Author(s):

Jordan, Nehemiah

Report Date:

14 Apr 1961

Media Count:

27 Page(s)

Report Number(s):

P-2258

SBI-AD-F630 441

Monitor Series:

AD-F630 441

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Distribution Statement:

Announcement only; not available from DTIC. For availability information contact: Rand Corporation, Publications Department, 1700 Main Street, Santa Monica, CA 90406

Abstract:

(U) A hot controversy is going on at present. Computer engineers, programmers, and a select set of hard-headed social scientists are asserting, in faith and fervor, that we are at the verge of a significant scientific revolution, that we are at the verge, if not already beyond it, of building a machine that thinks. The present arguments on the thinking machine are a hopeless confusion of fact and fancy, of theories and data, of emotions and faiths. In our excitement we have lost sight of what thinking is, i.e., what the objective event pattern is, which we perceive as being thinking; and we have lost sight of what the machine is as well. If we stop to consider the matter carefully and regain our sight we will clearly see that the present argument is irrelevant for thinking. We will be able to specify the necessary and sufficient conditions for the construction of a machine which can be accepted as a thinking machine. And we will also find that the construction of such a machine is, at present, inconceivable. In addition we will more clearly see what the currently so-called thinking machines really are.

Abstract Classification:

Unclassified

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0294731

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GPS, A PROGRAM THAT SIMULATES HUMAN THOUGHT

Personal Author(s):

NEWELL,A

SIMON,H A

Report Date:

10 Apr 1961

Media Count:

26 Page(s)

Report Number(s):

P-2257

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Effort was directed toward showing that the techniques that have emerged for constructing sophisticated problem-solving programs also provide us with new, strong tools for constructing theories of human thinking. They allow us to merge the rigor and objectivity associated with behaviorism with the wealth of data and complex behavior associated with the gestalt movement. To this end their key feature is not that they provide a general framework for understanding problem-solving behavior (although they do that too), but that they finally reveal with great clarity that the free behavior of a reasonably intelligent human can be understood as the product of a complex but finite and determinate set of laws. Although we know this only for small fragments of behavior, the depth of the explanation is striking. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA081106

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Application of Human Relations Research to Administration,

Personal Author(s):

Jordan, Nehemiah

Report Date:

10 Apr 1961

Media Count:

21 Page(s)

Report Number(s):

RAND/P-2273

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is threefold; an attempt will be made to: spell out at least some of the reasons which make the simple application of academic research difficult; show that this research, even

as it is, can be of help to administrators and; suggest a way of facilitating communication between administrators and academic investigators to their mutual benefit.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0257816

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METHODS OF SOLUTION OF LINEAR PROGRAMS UNDER UNCERTAINTY. NOTES ON LINEAR PROGRAMMING AND EXTENSIONS. PART 56

Personal Author(s):

MADANSKY,ALBERT

Report Date:

06 Apr 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Most applied linear-programming problems involve uncertainty in either the technology matrix, the requirement vector, or the cost. Some of the more usual methods of reducing the effects of uncertainty are (1) replacing the random elements by their expected values, (2) replacing the random elements by pessimistic estimates of their values, and (3) recasting the problem into a two-stage program so that, in the second stage, one can compensate for inaccuracies in the activities of the first stage. These methods are called the expected-value solution, the fat solution, and the slack solution, respectively. The one-stage linear program is examined under uncertainty in some detail, pointing out the relation between these various solutions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0612512

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CURRENT COMMUNIST TACTICS IN INDONESIA,

Personal Author(s):

PAUKER, Guy J

Report Date:

04 Apr 1961

Media Count:

19 Page(s)

Report Number(s):

P-2254

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0666943

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BOUNDARY EFFECTS ON THE ENERGY LOSS OF CHARGED PARTICLES,

Personal Author(s):

Stern, Edward A

Report Date:

04 Apr 1961

Media Count:

57 Page(s)

Report Number(s):

P-2270

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The energy loss of a charged particle moving at a constant velocity and passing normally through the boundary between two dielectric media is calculated. Attention is focused on the effects of the boundary and it is shown that the boundary creates two new mechanisms for losing energy. These are transition radiation and surface plasma oscillations. In addition, there are boundary corrections to the losses that are suffered by the particle in passing through the bulk material which are only important if the path length in the medium is of the order of the wavelength associated with the energy loss. The initiation of the emission of Cerenkov radiation as the particle first enters a medium is also studied in detail. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

AD0613858

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METHODS OF SOLUTION OF LINEAR PROGRAMS UNDER UNCERTAINTY,

Personal Author(s):

Madansky,A

Report Date:

Apr 1961

Media Count:

10 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Abstract:

(U) The three most usual methods of reducing the effects of uncertainty in the technology matrix, requirement vector, or cost vector of a linear programming problem are the expected-value solution, the 'fat' solution, and the 'slack' solution. These methods are explained in some detail, and the relation between these various methods is pointed out. (Author)

Abstract Classification:

Unclassified

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0408623

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/408623.pdf

Size: 11 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD408623>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SYSTEM AND TOTAL FORCE COST ANALYSIS

Descriptive Note:

Research memo.

Personal Author(s):

Novick, David

Report Date:

Apr 1961

Media Count:

148 Page(s)

Report Number(s):

RM-2695-PR

XC-DCSRTAF-DDP

Contract Number:

AF49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This memorandum describes the aims, concepts, and methods of military cost analysis as developed by the Cost Analysis Department of The RAND corporation. Like the 1956 report on Weapon System Cost Methodology, which it replaces, the present memorandum is concerned basically with the estimation of costs for proposed military activities so that informed choices can be made among them. It extends the earlier report by considering in more detail the underlying principles of cost analysis (Chapter I), and by describing methods for analyzing the costs of total force structures as well as individual systems (Chapter III). In Chapter II, the earlier cost categories are refined, particularly by the provision of categories for research and development activities which now constitute an increasing share of system costs. By generalizing methods and examples, the scope of analysis is extended to support and control systems as well as weapon systems. In Chapter IV, the usefulness of cost sensitivity analysis is explained and illustrated by examples. The appendix describes detailed methods of estimating system manpower requirements.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0663396

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET SPACE EXPERIMENTS AND ASTRONAUTICS,

Personal Author(s):

Krieger,F J

Report Date:

31 Mar 1961

Media Count:

46 Page(s)

Report Number(s):

P-2261

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The lecture describes the long and active history of Soviet interest in space flight leading up to the launching of Sputniks I and II. A discussion of Soviet technical and popular literature on space flight is included. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0465800

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ARMIES IN THE PROCESS OF POLITICAL MODERNIZATION,

Personal Author(s):

Pye, Lucian W

Report Date:

28 Mar 1961

Media Count:

32 Page(s)

Report Number(s):

P-2265

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0432335

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/432335.pdf

Size: 290 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD432335>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A CASE FOR SURVIVAL DEEP UNDERGROUND

Personal Author(s):

Brode, H L

O'Sullivan, J J

Report Date:

27 Mar 1961

Media Count:

12 Page(s)

Report Number(s):

RAND-P-2263

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0610832

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HOW USEFUL ARE 'SCIENTIFIC' TOOLS OF MANAGEMENT,

Personal Author(s):

Hearle,Edward F R

Report Date:

24 Mar 1961

Media Count:

9 Page(s)

Report Number(s):

P-2260

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is urged that public administrators become familiar with formulating problems in the explicit symbolism of models, striving to make goals and criteria fully explicit even if the explication is a little forced. It is also urged that they become generally familiar with the mathematical properties of these tools so that real world problems suitable for solution by their use can be recognized. Such problems do exist: resource allocations must be made, waiting line delays must be dealt with, competitive strategies must be selected. It is suggested that both the form and the substance of the scientific tools of management can make a substantial contribution to the solution of these and other problems of public administration.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0258954

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A PRELIMINARY INVESTIGATION OF THE MOTION OF A LONG, FLEXIBLE WIRE IN ORBIT

Personal Author(s):

GARBER, T B

Report Date:

23 Mar 1961

Media Count:

1 Page(s)
Report Number(s):
ARPA-189 61
Contract Number:
SD79
Monitor Series:
189 61
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0256665
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A SELECTED LIST OF UNCLASSIFIED PUBLICATIONS OF THE SOCIAL SCIENCE DEPARTMENT 1948-1961
THE RAND CORPORATION
Report Date:
15 Mar 1961
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0256871

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GENERALIZED FORMULATION FOR INERTIAL NAVIGATORS AND GRAVITATIONALLY STABILIZED SATELLITES

Personal Author(s):

GORDON,G

SMITH,M C

Report Date:

10 Mar 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This report provides a three-dimensional mathematical analysis of two types of inertial navigators in use today. The resulting analytical expressions give the inertial navigators' position and azimuth errors in terms of the sensing instrument performance. The same equations can be used in analyzing the rotational motion of a gravitationally stabilized satellite. The results of this study may prove to be applicable to mobile missile programs, which at present propose to use systems of the sort analyzed here. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0257815

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE DIFFUSION MATRIX OF RADIATIVE TRANSFER

Personal Author(s):

UENO,SUEO

Report Date:

09 Mar 1961

Media Count:

1 Page(s)

Report Number(s):

ARPA-189 61

Contract Number:

SD79

Monitor Series:

189 61

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The diffusion matrix, formerly derived with the stochastic model of radiative transfer, is derived using auxiliary equations in conjunction with the Milne integral equations. Also derived is the extension concerning the Neumann solution as given by Busbridge. In the case of diffuse reflection and transmission of parallel rays, the solutions are expressed in terms of a pair of scattering and transmission functions for each of the two boundaries of the atmosphere. Thhes global functions are given by X and Y functions that are equal to those previously found by Bellman and Kalaba. Whereas the diffusion matrix formally has a somewhat similar appearance to a map yielded by Preisendorfer, the mathematical development is different. If the optical properties of the medium are constant throughout the atmosphere, the reflectance and transmittance operators reduce to those given by Sobolev.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0639562

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF DATA INPUT IN AUTOMATIC DATA PROCESSING SYSTEMS.

Personal Author(s):

POLLACK,Solomon L

Report Date:

09 Mar 1961

Media Count:

15 Page(s)

Report Number(s):

P-2246

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper contends that data-input problems can be dealt with most effectively if data-input techniques and equipment are made integral parts of an electronic data processing (EDP) system. Plans for data-input equipment and techniques should be developed concurrently with those for the EDP equipment and system design. The newer data-input techniques, such as character recognition by optical sensing or transmission of digital information over phone lines, can best be exploited if their use is considered while the data processing system is being designed, rather than being added as bits and pieces. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0432334

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SIMULATION OF VERBAL LEARNING BEHAVIOR,

Personal Author(s):

Feigenbaum,E A

Report Date:

01 Mar 1961

Media Count:

32 Page(s)

Report Number(s):

P2235

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An information processing model of elementary human symbolic learning is given a precise statement as a computer program, called Elementary Perceiver and Memorizer (EPAM). The program simulates the behavior of subjects in experiments involving the rote learning of nonsense syllables. A discrimination net which grows is the basis of EPAM's associative memory. Fundamental information processes include processes for discrimination, discrimination learning, memorization, association using cues, and response retrieval with cues. Many well-known phenomena of rote learning are to be found in EPAM's experimental behavior, including some rather complex forgetting phenomena. EPAM is programmed in Information Processing Language V. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0432329

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF THE CHINESE IN LAO SOCIETY,

Personal Author(s):

Halpern,J M

Report Date:

01 Mar 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0632532

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ECONOMIC POTENTIAL OF COMMUNICATION SATELLITES,

Personal Author(s):

Meckling, William

Report Date:

01 Mar 1961

Media Count:

24 Page(s)

Report Number(s):

P-2216(rev.)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0264783

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/264783.pdf

Size: 668 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD264783>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OPTIMAL TIMING IN MISSILE LAUNCHING: A GAME-THEORETIC ANALYSIS

Personal Author(s):

Dresher, Melvin

Johnson, Selmer

Report Date:

01 Mar 1961

Media Count:

29 Page(s)

Report Number(s):

RAND-RM-2723

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Suppose that Blue plans to launch a missile during some specified time interval. Prior to a launching, Blue must expose the missile for a time period, during which the missile is vulnerable to attack and may be destroyed by Red. Prior to its exposure, Blue's missile is assumed to be underground, where it may be pinned down for a time interval or possibly destroyed by a Red missile. The optimal time is formulated for Blue to launch his missile, and the optimal time is analyzed for Red to attack Blue. This scheduling problem is formulated and analyzed as a two-person game. Various game models are considered in which the three types of vulnerability are introduced as stochastic elements. The optimal strategies, i.e., the optimal launching times, are described.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0256411

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/256411.pdf

Size: 765 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD256411>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRESSURE RESPONSE WITHIN AN ENCLOSURE SUBJECT TO A BLAST WAVE

Personal Author(s):

Elswick, W R

Report Date:

01 Mar 1961

Media Count:

38 Page(s)

Report Number(s):

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) A generalized mathematical model is presented of the rise of pressure with time within an enclosure as a function of enclosed volume, leakage opening area, static overpressure, and nuclear weapon yield. The results are shown graphically. Their applicability to the design of protected enclosures is illustrated by two examples of personnel shelters: a small home shelter, and a considerably larger arrangement housing up to a hundred people.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0639561

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A SIMULATION MODEL FOR DATA SYSTEM ANALYSIS.

Personal Author(s):

Gainen, Leon

Report Date:

01 Mar 1961

Media Count:

21 Page(s)

Report Number(s):

P-2195

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper develops the thesis that data system designers can bring their profession closer to a predictive science. Only by adapting, for the purpose of data system analysis, analytical tools which make possible prediction and quantification of data system behavior within the management system structure can this be done. The paper discusses one such tool, a generalized data system model, and describes a technique of simulating dynamic system operation with such a model in order to provide the data system designer insights on the behavior to expect from the data system as it would operate. Some of the benefits possible through such simulation are explored. The paper concludes that the major use for the present of this analytical technique is to test the feasibility of a data system design before acquisition of actual hardware. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0256666

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUATIONS OF PERTURBED MOTION FOR A SATELLITE IN A NEARLY CIRCULAR, NEARLY EQUATORIAL ORBIT

Personal Author(s):

SMITH,F T

Report Date:

27 Feb 1961

Media Count:

73 Page(s)

Report Number(s):

RM-2716

Contract Number:

AF 49(638)700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A set of differential equations is derived which defines the perturbed motion of a celestial body in terms of a particular set of orbital parameters. This set of orbital parameters is well suited to orbits that are circular or nearly so, since no singularities occur in the equations when the orbital eccentricity vanishes. In addition, this set of orbital parameters may be used to define orbits of small or zero inclination. The set of equations is given in the forms for both elliptic and circular orbits, with the perturbing acceleration expressed in terms of rectangular coordinates and derivatives of a disturbing function. Applications of the equations to the calculation of general perturbations, special perturbations, and orbit transfers are suggested. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0617263

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GENERAL NASUTION'S MISSION TO MOSCOW.

Descriptive Note:

Revised ed.,

Personal Author(s):

Pauker,G J

Report Date:

27 Feb 1961

Media Count:

18 Page(s)

Report Number(s):

P-2229

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

ADF630442

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Modeling Human Mental Processes,

Personal Author(s):

Simon,H A

Report Date:

20 Feb 1961

Media Count:

24 Page(s)

Report Number(s):

P-2221

SBI-AD-F630 442

Monitor Series:

AD-F630 442

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Distribution Statement:

Announcement only; not available from DTIC. For availability information contact: Rand Corporation, Publications Department, 1700 Main Street, Santa Monica, CA 90406.

Abstract:

(U) There now exist at least a half dozen computer programs that simulate some of the information processes that humans use to perform problem solving, learning, perceiving, and thinking tasks. These programs constitute theoretical explanations of the corresponding human behavior, and can be tested by comparing the computer traces they produce with the verbal behavior of subjects in the

psychological laboratory. This paper surveys this new kind of theory building and theory testing in psychology, and relates it to other uses of simulation as a tool of psychological research.

Abstract Classification:

Unclassified

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

AD0615361

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMIZATION OF MULTISTAGE ORBIT TRANSFER PROCESSES BY DYNAMIC PROGRAMMING,

Personal Author(s):

Smith,F T

Report Date:

17 Feb 1961

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Abstract:

(U) This paper discusses the development of a set of variation of parameter equations that define state transformations of a vehicle in terms of some selected set of two-body orbit parameters. The state transformation equations obtained by integration of the variation of parameter equations are substituted in a performance index that is optimized by the methods of dynamic programming. This optimization gives a sequence of incremental velocity vectors to be applied to the vehicle to transfer it from an arbitrary initial orbit to the desired orbit. In addition to the multistage process, three special cases are considered: a single stage process, a double stage process, and a special performance index pertinent to 24-hr communication satellites. (Author)

Abstract Classification:

Unclassified

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0634199

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRODUCTION FUNCTIONS AND CAPITAL DEPRECIATION,

Personal Author(s):

Enke, Stephen

Report Date:

16 Feb 1961

Media Count:

23 Page(s)

Report Number(s):

P-2226

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Production functions that determine the shares in output and income 'going' to labor, capital, or land, are basically output functions. Output is the dependent variable and stocks of 'capital,' and of certain other inputs, are the independent variables. This basic relationship--but not net income shares--is independent of the subsequent longevity of the factor inputs. Output isoquants can readily be reinterpreted as constant gross value added curves if the value of the 'throughput' is constant. Accountants and economists can subsequently distinguish net and gross value added isoquants. But output is output and physical. Determination of the most economical capital-to-labor combination requires that the gross cost of these factors, including the cost of capital stock depreciation, be considered. If only net interest and wages are taken to be the cost of capital and labor respectively, these costs must be related to a net value added function, otherwise the supposed 'optimum' will involve too much capital relative to labor. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425942

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEW TOOLS FOR PLANNERS AND PROGRAMMERS,

Personal Author(s):

Novick,David

Report Date:

14 Feb 1961

Media Count:

21 Page(s)

Report Number(s):

P2222

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problems involved in U. S. security planning have become matters of increasing concern in recent years. The record, both in the public press and in the Congress, is replete with examples of interest in such matters as the rising cost of defense, the difficulties of obtaining performance as promised, interservice rivalry, the technological race with Soviet Russia and lead time. Much criticism has been laid at the door of our slow and somewhat cumbersome decision making machinery. Delays in some important programs, costly cancellations of others and the emergence of Soviet Russia and Communist China as dangerous competitors in the nuclear-rocket-space age all have been charged to failures of the current national security organization and the planning and decision making process. As a result, a series of attempts have been made to shore up and strengthen existing organization and procedure without any real definition of the requirements of the planners and decision makers in this era of technological explosion. Before new machinery can be devised or old tools modified, it would seem that the requirements, or performance objectives, must be spelled out. As a result, it is the purpose of this paper to discuss some of the conditions which make the current machinery inadequate and new tools which can meet the needs of the planners and decision makers. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616572

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPLICATIONS OF DYNAMIC PROGRAMMING TO SPACE GUIDANCE, SATELLITES, AND TRAJECTORIES.

Descriptive Note:

Revised ed.,

Personal Author(s):

Bellman,Richard

Dreyfus,Stuart

Kalaba,Robert

Report Date:

07 Feb 1961

Media Count:

11 Page(s)

Report Number(s):

P-1923

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The feasibility of space travel and man-made satellites has triggered a rash of interest in the determination of optimal trajectories and generally in guidance and control processes. These problems, for so long of purely mathematical and astronomical concern, have now become part of the engineering domain. The result is that there is a great demand for feasible numerical solutions of the associated analytic problems. Many of these are classically of great difficulty. As a result of the intensive study of these questions, it is now well appreciated that the classical techniques of the calculus of variations are inoperative unless the problem is rather carefully selected. The applicability is shown of a new mathematical technique, based on the theory of dynamic programming, to the computational solution of trajectory problems. Many problems, seemingly inaccessible to the conventional methods of the calculus of variations, have already been resolved. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607467

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AUTOMATIC INDEXING: AN EXPERIMENTAL INQUIRY.

Descriptive Note:

Revised ed.,

Personal Author(s):

MARON,M E

Report Date:

02 Feb 1961

Media Count:

37 Page(s)

Report Number(s):

P-2180

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This inquiry examines a technique for automatically classifying (indexing) documents according to their subject content. The task, in essence, is to have a computing machine read a document and on the basis of the occurrence of selected clue words, decide to which of many subject categories the document in question belongs. This paper describes the design, execution and evaluation of a modest experimental study aimed at testing empirically one statistical technique for automatic indexing.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603147

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AUTOMATIC CHECKOUT EQUIPMENT: A SUMMARY REPORT ON RAND'S STUDY,

Personal Author(s):

FIRSTMAN,Sidney I

Report Date:

01 Feb 1961

Media Count:

54 Page(s)

Report Number(s):

B-239

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0256957

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DECISION RULES FOR THE DISPOSAL OF EXCESS AIR FORCE STOCK

Personal Author(s):

HOUGHTEN,J W

HOLTON,R H

Report Date:

01 Feb 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) IN 1959 THE Air Force disposed of surplus valued at over two and a half billion, not including aircraft. Part of the problem of carrying on an intelligent disposal function (one that originates in constantly changing technology and shifts in Air Force responsibilities and techniques) is the question of which items should be coded as excess and put up for disposal. The present study develops rules for doing this. It also considers similarities and differences between the disposal problems of the Air Force and private industry and considers the possible impact of surplus military items on the open market. The disposal rules arrived at in RM-2722 are presented in two steps. The first is a relatively simple review rule for screening possible items for disposal. The second is a more complete but necessarily more time-consuming decision rule for determining precisely how many units should be coded as excess. Application of the decision rules of RM-2722 should repay the Air Force by reducing the number and expense of judgmental errors that occur when some costs may not be taken into account; by putting stock disposal on a routine basis; and by easing explanations on the subject of surplus disposal procedures. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0686722

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF OPERATIONAL ANALYSES IN PLANNING AN EFFECTIVE MISSILE GROUND SYSTEM,

Personal Author(s):

Firstman,Sidney I

Report Date:

01 Feb 1961

Media Count:

22 Page(s)

Report Number(s):

P2267

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The report delineates the checkout procedures used to maintain missile operational readiness and evaluates the effectiveness of the tests in relation to costs incurred by testing.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0612921

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROBLEMS OF FORCE POSTURE EVALUATION,

Descriptive Note:

Revised ed.,

Personal Author(s):

McGarvey,David

Report Date:

30 Jan 1961

Media Count:

18 Page(s)

Report Number(s):

P-2138

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Methods of computation and reporting of results are utilized which provide the decision maker or evaluator with synthetic experience in central war. By emphasizing flexible methods which lend themselves to quick computation, the user can ask questions of the model, test out particular hypotheses or doctrines that seem important, and explore the effects of unpredictables. In order that the user will understand the 'why' of the computations and have an understanding of the significance of the assumptions and results, transparent computational methods were emphasized. When necessary, the aggregated calculations were backed up by more detailed computation of some facets (selective

focusing). It is claimed that the resultant model and its utilization do not mislead. It was useful in developing an understanding of the over-all implications of various strategic doctrines and force posture decisions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0432333

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME LINGUISTIC PROBLEMS OF RUSSIAN GRAPHIC ABBREVIATIONS,

Personal Author(s):

Stewart,W A

Report Date:

26 Jan 1961

Media Count:

15 Page(s)

Report Number(s):

P2206

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Written Russian texts on scientific or technical subjects almost always contain a quantity of special indeclinable forms known as abbreviations. Although abbreviations may reflect certain characteristics of the structure of the full-forms of which they are abridgements, and indeed may be described in terms of the distinctive and structural features which characterize the rest of the language, abbreviations pose certain additional problems in MT. Since some abbreviations represent strings of full-form occurrences there exists the possibility of dealing with them either as unit morphs or as phrases. Also, since the grammatical suffix which normally serves as a syntactical marker in Russian is usually dropped in forming abbreviations, the question of ascertaining the syntactical relationships of a given abbreviation with its environment must be solved by other means. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0257288

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRANSFORMATIONAL CRITERIA FOR THE CLASSIFICATION OF PREDICATIVE GENITIVE CONSTRUCTIONS IN RUSSIAN

Personal Author(s):

WORTH,DEAN S

Report Date:

24 Jan 1961

Media Count:

1 Page(s)

Report Number(s):

AFOSR-148

Contract Number:

AF49 638 737

Monitor Series:

148

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A major advantage of the transformational approach to syntactic structure is that the investigator is no longer bound to the low levels of generality inherent in the morphological detail of actual sentences. Instead, he can regard syntax as a dynamic, addressor-oriented process, the units of which form a hierarchy of functional abstractions. This conception is illustrated by an analysis of Russian constructions containing genitive substantives that must be modified by another unit, although the exact form (adjective or substantive) of this second unit is irrelevant. The transformationally determined varieties of such constructions are cataloged, and it is shown that all such constructions contain either an actual or an implied predication. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

AD0636173

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE OPTIMIZATION OF MULTI-STAGE ORBIT TRANSFER PROCESSES BY DYNAMIC PROGRAMMING.

Personal Author(s):

SMITH, F T

Report Date:

24 Jan 1961

Media Count:

28 Page(s)

Report Number(s):

P-2177-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Distribution Statement:

Availability: Hard copy available from University of California Press, Los Angeles, Calif. \$2.00

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0432257

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MECHANICS OF SOME LIMITED DISARMAMENT MEASURES. A SIMPLE ECONOMIC TREATMENT,

Personal Author(s):

Ferguson, Allen R

Report Date:

23 Jan 1961

Media Count:

20 Page(s)

Report Number(s):

P2140

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper deals with one small aspect of the rapidly growing field of arms control. Arms control, in current terminology, is considerably broader than disarmament. It embraces all problems ranging from total disarmament to the selective strengthening of armaments to increase the stability of mutual deterrence. Problems of reducing the risk of war and of its devastation if it comes, the mechanics and tactics of negotiation, the politics and technology of inspection, the legal, military and political aspects of enforcement and sanctions, and the hard detailed analysis of the military impact of specific arms-control measures are all subjects of interest, research, and exposition. Although the field has a growing theoretical literature relating arms control to military strategy in general and to deterrence in particular, little has been written on arms limitation as a process relating to the economics of military power. The present paper is addressed to only one specific question: How can disarmament measures affect the economics of military power. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0432332

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DIRECTIONS FOR FUTURE GROWTH OF THE SOVIET ECONOMY,

Personal Author(s):

Kershaw,J A
Report Date:
23 Jan 1961
Media Count:
1 Page(s)
Report Number(s):
P2201
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0676653
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOME NUMERICAL EXPERIMENTS USING NEWTON'S METHOD FOR NONLINEAR PARABOLIC AND
ELLIPTIC BOUNDARY-VALUE PROBLEMS,
Personal Author(s):
Bellman,Richard
Juncosa,Mario
Kalaba,Robert
Report Date:
23 Jan 1961
Media Count:
19 Page(s)
Report Number(s):
P-2200
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Using a generalization of Newton's method, a nonlinear parabolic equation of the form $u_{\text{sub } t} - u_{\text{sub } xx} = g(u)$, and a nonlinear elliptic equation $u_{\text{sub } xx} + u_{\text{sub } yy} = e^{\text{superscript } u}$, are solved

numerically. Comparison of these results with results obtained using the Picard iteration procedure show that in many cases the quasilinearization method offers substantial advantages in both time and accuracy. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0257286

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE VALUE OF A DEPENDENCY CONNECTION

Personal Author(s):

HAYS,DAVID G

Report Date:

20 Jan 1961

Media Count:

1 Page(s)

Report Number(s):

AFOSR-150

Contract Number:

AF49 638 737

Monitor Series:

150

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In sentence-structure determination, values are tentatively defined as numbers assigned to types of syntactic relations in such a way that connections of higher value are established in preference to connections of lower value. For a text in which sentence structures are known, the values of some syntactic relations can be estimated by the following plan: assign value 1 to a relation provided no relation is known to have lower value; assign value 2 to a relation provided all relations known to have lower value are also known to have value 1; etc. The same procedure can be used for assigning adjectives to order classes, and for other similar purposes. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0610833

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FOUR TYPES OF LEARNING: A PHENOMENOLOGICAL ANALYSIS,

Personal Author(s):

Jordan,Nehemiah

Report Date:

19 Jan 1961

Media Count:

30 Page(s)

Report Number(s):

P-2199

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper learning is treated at a relatively low level of abstraction. The learning processes are abstracted from the phenomenal given, leaving open the more basic question of whether there is a unique process underlying all learning phenomena or not. A learning process found in the developing child, called maturational learning, is distinguished from the learning process found in an adult. In addition, three learning processes common to children and adults are considered: (1) learning to do things, (2) acquiring knowledge, and (3) learning to get along with people or in groups.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0663393

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPRAISING SOVIET ASTRONAUTICS.

Descriptive Note:

Revised ed.,

Personal Author(s):

Krieger, F J

Report Date:

17 Jan 1961

Media Count:

31 Page(s)

Report Number(s):

P-2107

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Soviet astronautics is viewed from four aspects: the scientific, the technical, the military, and the political.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0634200

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DECISION MAKING FOR PUBLIC INVESTMENT: DISCUSSION,

Personal Author(s):

Milliman, J W

Report Date:

15 Jan 1961

Media Count:

14 Page(s)

Report Number(s):

P-2252

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The report presents a critique on 'Welfare Aspects of Benefit-Cost Analysis,' by John M. Krutilla, and 'Water and Welfare,' by Robert Dorfman. In the light of these papers it comments on the RAND-sponsored study Water Supply: Economics, Technology, and Policy by Hirshleifer, De Haven, and Milliman (University of Chicago Press, 1960). (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0432331

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PRESENT STATUS OF NONLINEAR PROGRAMMING,

Personal Author(s):

Wolfe,P

Report Date:

12 Jan 1961

Media Count:

32 Page(s)

Report Number(s):

P2181

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A survey is undertaken of the so-called 'primal' and 'Lagrangian' methods for the solution of the convex, non-discrete mathematical programming problem. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0670831

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CHINESE COMMUNIST LINE ON NEUTRALISM,

Personal Author(s):

Halpern,A M

Report Date:

11 Jan 1961

Media Count:

49 Page(s)

Report Number(s):

P-2026

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper advances a set of hypotheses concerning the utilization of appeals to Asian neutralism as an element in Communist China's foreign policy. The hypotheses are limited to the period November, 1957-May, 1960. The exploitation of neutralism is seen as a subordinate element in a policy whose basic problem was the exploitation of a presumed position of strength. While Communist Chinese appeals to neutralism differed according to whether they were addressed to 'newly independent' countries or to those 'still struggling' for independence, they consistently aimed at weakening the U. S. military position in Asia. Fluctuations and inconsistencies in the Communist Chinese line are attributed to the ideological predispositions of the Communist Chinese leadership, to the conflict between China and Yugoslavia concerning 'active coexistence,' and to the impact of trends and events in Asia disadvantageous to China's ambitions. Since October, 1959, together with increasing open ideological conflict between Communist China and the Soviet Union, Communist China's diplomatic practice is believed to have reverted largely to the pattern of early 1958 under direct Soviet pressure. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425821

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON STABILITY IN DETERRENT RACES,

Personal Author(s):

Hoag,Malcolm W

Report Date:

10 Jan 1961

Media Count:

35 Page(s)

Report Number(s):

P2188

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0613268

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MODEL PUNCHED CARD SYSTEM FOR PRODUCTION CONTROL,

Personal Author(s):

HILL,L S

Report Date:

06 Jan 1961

Media Count:

105 Page(s)

Report Number(s):

P-2065

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A well-considered, ordered, and thoroughly integrated procedure for control of production employing Electric Accounting Machines (EAM) is presented. Such machines are used in the procedure to record, coordinate, and analyze all procurement, material control, cost control, and tool control data. Much of the effort in industry to date has been oriented toward the mechanization of clerical processes with relatively little effort on the total control system. This paper is concerned with the development of a system for control of manufacturing from time of raw material receipt through the transformation into finished product.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0255161

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPLICATION OF THE BAYES TECHNIQUE TO SPARE-PARTS DEMAND PREDICTION

Personal Author(s):

MCGLOTHLIN,W H

BEAN,ELOISE E

Report Date:

03 Jan 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:
AD0618181
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) RISK, THE DISCOUNT RATE, AND INVESTMENT DECISIONS,
Personal Author(s):
Hirshleifer, Jack
Report Date:
Jan 1961
Media Count:
10 Page(s)
Report Number(s):
P-2143
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY
DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
ADA473407
Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/a473407.pdf

Size: 6 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/ADA473407>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Games of Strategy: Theory and Applications

Descriptive Note:

Monograph

Personal Author(s):

Dresher, Melvin

Report Date:

Jan 1961

Media Count:

197 Page(s)

Report Number(s):

RAND/CB-149-1

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Games of Strategy: Theory and Applications, originally published by Prentice Hall in 1961, was written by Melvin Dresher, a RAND research mathematician, during the heyday of Game Theory at RAND. This book introduced readers to the basic concepts of game theory and its applications for military, economic, and political problems, as well as its usefulness in decision making in business, operations research, and behavioral science. More than 40 years after its first publication as a RAND research study, and to celebrate RAND's 60th Anniversary, RAND brings this classic work back into print in paperback and digital formats. The author presents in an elementary and formal manner the mathematical theory of games of strategy and some of its applications. Although many of the applications are discussed in military terms, they can easily be formulated in economic or social science terms. An attempt has been made to develop the subject matter in such a way as to make the volume adaptable as a text on the theory of games in colleges and universities. The book starts in Chapter 1 with an exposition of games of strategy, with examples taken from parlor games as well as from military games. The next two chapters treat the basic topics in the theory of finite games (i.e., the existence of optimal strategies and their properties). Chapters 4 and 5 deal with the representation of games and the

computation of optimal strategies. Since many games involve an infinite number of strategies, Chapters 6, 7, and 8 deal with such games by developing the necessary mathematics (e.g., probability distribution functions and Stieltjes integrals) for handling infinite games. The results on infinite games are applied in Chapters 9 and 10 to two general classes of games -- timing games and tactical games. Finally, the last chapter provides an application of moment space theory to the solution of infinite games.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0639564

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE USE OF MANNED SIMULATION IN THE DESIGN OF AND OPERATIONAL CONTROL SYSTEM.

Personal Author(s):

GEISLER, M A

Steger, W A

Report Date:

Jan 1961

Media Count:

13 Page(s)

Report Number(s):

P-2322

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper describes the general features of the planning and operations phases of a new weapon system. The uncertainties inevitable in planning mean that considerable effort is made during the operations phase to adjust the weapon system and its resources to the actual environment it finds so as to attain the desired level of operational capability. The adjustment mechanism is called an operational control system. Elements of such an operational control system are described. The proposal is made that a better control system can be designed if simulation is used to help design it during the planning phase. The use of simulation will not only produce a better control system earlier but it will permit the

planners to adjust the other resources provided for the weapon system so that they are compatible with the environment and the control system. An example of such a study is described. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0656679

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/656679.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD656679>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME THINKING ABOUT 'SYSTEM'

Personal Author(s):

Jordan, N

Report Date:

30 Dec 1960

Media Count:

32 Page(s)

Report Number(s):

RAND/P-2166

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The paper attempts to dispel some of this confusion involving the word 'system'. It attempts to show that 'system' is semantically legitimate per se, despite its many specific meanings by: (a) reviewing some

obvious but neglected facts of perception and cognition; (b) explicating an implication of these facts -- the 'core meaning' of a word; (c) trying to show that the many definitions of 'system' are correct applications of the core meaning of 'system' to concrete cases; (d) formulating a possible taxonomy of these applications.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0432330

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TOWARD INTELLIGENT MACHINES,

Personal Author(s):

Williams,J D

Report Date:

29 Dec 1960

Media Count:

13 Page(s)

Report Number(s):

P2170

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0633996

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METEOROID HAZARD TO NUCLEAR POWER STATIONS IN SPACE,

Personal Author(s):

BJORK,R L

Report Date:

21 Dec 1960

Media Count:

16 Page(s)

Report Number(s):

P-2172

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616662

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEUTRON BRANCHING PROCESSES.

Descriptive Note:

Revised ed.,

Personal Author(s):

Mullikin,T W

Report Date:

20 Dec 1960

Media Count:

33 Page(s)

Report Number(s):

P-1985

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper presents a study of the neutron population in a nuclear reactor as a branching process. Results are presented concerning the extinction probability of a supercritical reactor near the critical dimension, extending results of T. E. Harris. Parts of the theory of branching processes are presented; these are developed in a general setting in Harris's forthcoming monograph on this subject. The results of this paper apply to spheres, to infinite slabs, and to rods, with the assumptions that the neutron energy is constant and that the collision-fission process is isotropic. The assumption of homogeneity is also made, although similar results can be obtained in nonhomogeneous cases of restricted types; e.g., in the sphere the variation of physical properties should depend only on the radial coordinate. One consequence of this analysis is the determination of a new computational method for estimating the critical dimension and the steady-state flux for the above-mentioned reactors. This replaces the eigenvalue problem of transport theory by a nonlinear functional equation that can be solved by iteration. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0425934

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CRUDE ANALYSIS OF STRATEGIC CHOICES,

Personal Author(s):

Ellsberg,Daniel

Report Date:

15 Dec 1960

Media Count:

11 Page(s)

Report Number(s):

P2183

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

ADF630443

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Use of Heuristic Programming in Management Science.

Descriptive Note:

Revised edition,

Personal Author(s):

Tonge,Fred M

Report Date:

12 Dec 1960

Media Count:

14 Page(s)

Report Number(s):

P-2127

SBI-AD-F630 443

Monitor Series:

AD-F630 443

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Distribution Statement:

Announcement only; not available from DTIC. For availability information contact: Rand Corporation, Publications Department, 1700 Main Street, Santa Monica, CA 90406

Abstract:

(U) Intelligent problem-solving, whether by man or by machine, implies selective rather than just rapid behavior. Humans achieve this selectivity through heuristics--principles that, on the average, contribute to reduction of search in problem-solving. Heuristic programming is the construction of computer problem-solving programs whose behavior is similarly organized. This paper surveys the present and potential use of heuristic programming in management science.

Abstract Classification:

Unclassified

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0252910

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE ROLE OF DATA INPUT IN AUTOMATIC DATA PROCESSING SYSTEMS

Personal Author(s):

POLLACK, SOLOMON L

Report Date:

09 Dec 1960

Media Count:

37 Page(s)

Report Number(s):

RM-2681

Contract Number:

AF 49(638)700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This study primarily concerned with data input which is defined as the generation, collection, and transmittal of data to be entered into a computer for automatic processing. The study describes the several stages of data input, a few problem areas, and some of the techniques and recent equipment development useful for solving them. Certain basic principles that can be used as a basis for improving data input are: (1) data-input specialists should be employed more widely; (2) input error prevention, detection, and correction routines should be incorporated in data systems; (3) data input problems should be considered when an electronic data processing system is designed; and (4) the Air Force should plan, at this time, for the role that data input will play in automatic data processing systems in the 1965 to 1975 time period. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0656680

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DECISION-MAKING UNDER UNCERTAINTY AND PROBLEM SOLVING: A GESTALT THEORETICAL
VIEWPOINT,

Personal Author(s):

Jordan,N

Report Date:

01 Dec 1960

Media Count:

40 Page(s)

Report Number(s):

P-2156

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Phenomena of thinking, problem-solving, and decision-making are discussed. The discussion implies that men prefer to make decisions under conditions of certainty. When confronted with the necessity to make a decision under conditions of uncertainty they will procrastinate and take many actions in an attempt to achieve certainty before making the decision. These actions are of the nature of thinking and problem solving, requesting additional information, asking the advice of experts, etc., i.e., they attempt to structure the situation to achieve certainty.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0663394

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHAT CAN MANAGERIAL ECONOMICS CONTRIBUTE TO ECONOMIC THEORY,

Personal Author(s):

Hitch,Charles J

McKean,Roland N

Report Date:

01 Dec 1960

Media Count:

16 Page(s)

Report Number(s):

P-2155

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The following topics are discussed: (1) Our business behavioral inputs; (2) Government units behavior; (3) Managerial economics and normative economics.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0432328

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STANDARDS, STANDARDIZATION AND TEST EQUIPMENT,

Personal Author(s):

Rumer,W I

Report Date:

30 Nov 1960

Media Count:

27 Page(s)

Report Number(s):

P2153

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The terms 'standards,' 'standardization,' and 'test equipment' are often used in confusing and ambiguous ways. Their characteristics and implications are discussed. Illustrative examples are presented to establish perspective, understanding and a context for the use of these terms. The discussion of 'standards' considers their types, establishing authority, purpose, characteristics and costs. The section on 'standardization' examines effects it might have on design, production, logistics and training. 'Test equipment' is a supporting subsystem of the prime equipment; the discussion considers its functions, purposes, errors (due to tolerances and incomplete tests), and effect on the prime equipment. The intent is to gather together in one publication various aspects, especially the overall (not just dollar) cost, of standards and particularly standard items of test equipment. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0256277

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STANDARDIZATION OF AUTOMATIC TEST AND CHECKOUT EQUIPMENT: A PRELIMINARY DISCUSSION

Personal Author(s):

BARBOUR,A A

FIRSTMAN,S I

KAMINS,M

Report Date:

25 Nov 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This research memorandum is a guide for evaluating the technical and economic feasibility of standardizing automatic test and checkout equipment. It is intended to be useful alike to Air Force offices charged with reviewing contractors' proposals and to the contractors themselves. Five levels of standardization are defined: component, functional module, functional assembly, tester assembly, and testing system. Two opposing opinions are presented on the desirability and feasibility of standardization. Technical factors relevant to standardizing automatic checkout equipment (ACE) are shown, and each factor is discussed as it relates to feasibility at all levels of standardization. Factors dealing with economic feasibility are also investigated. For example, a weapon-system cost structure is examined to determine where the economic impact of ACE is typically observed, and how much of the system cost is typically affected by test and checkout automation. Within this framework, the potential effects of ACE standardization on weaponsystem cost/effectiveness are indicated. In addition, some pertinent points of inquiry concerning the various levels (above the component level) are outlined.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0432326

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEW AREAS OF APPLICATION OF COMPUTERS,

Personal Author(s):

Newell,Allen

Report Date:

21 Nov 1960

Media Count:

4 Page(s)

Report Number(s):

P2142

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0726038

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On the Generation of Normal Random Vectors,

Personal Author(s):

Scheuer,E M

Stoller,D L

Report Date:

21 Nov 1960

Media Count:

8 Page(s)

Report Number(s):

P-2144

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The simulation of a process may require the use of sampling techniques involving the generation of random vectors from a multivariate normal population with a specified variance-covariance matrix. This is an expository paper which discusses two methods for generating such vectors. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0253001

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE CHINESE COMMUNIST LINE ON NEUTRALISM

Personal Author(s):

HALPERN, A M

Report Date:

19 Nov 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This research memorandum is part of RAND's continuing analysis of Chinese foreign policy as it relates to military strategy and basic American interests. It analyzes the manner in which the Communist Chinese government made use of appeals to Asian neutralism in the period since November, 1957. The manipulation of neutralism is treated as an important aspect of the basic Sino-Soviet policy problem of the time, that of prudent and effective use of a position of strength. Besides aiming at weakening the United States military position in Asia, the Chinese during 1960 formulated the goal of overthrowing imperialism on a world-wide scale. The study concludes with a postscript on the Moscow Declarations of December 5, 1960, and their possible effect on future Chinese Communist foreign policy. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0617719

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USES OF ECONOMICS,

Personal Author(s):

Hitch,Charles J

Report Date:

17 Nov 1960

Media Count:

24 Page(s)

Report Number(s):
P-2179-RC
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0432327
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE NATURE AND FUNCTION OF MILITARY R + D,
Personal Author(s):
Klein,B H
Meckling,W H
Mesthene,E G
Report Date:
04 Nov 1960
Media Count:
8 Page(s)
Report Number(s):
P 2147
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0432256

Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/432256.pdf
Size: 769 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD432256>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) THE RAND STUDY OF WATER SUPPLY
Personal Author(s):
DeHaven, J C
Report Date:
03 Nov 1960
Media Count:
24 Page(s)
Report Number(s):
RAND-P-2136-RC
XD-DOD
Monitor Series:
DOD
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0260394
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) QUESTIONS FOR THE VELA PROGRAM ON DECOUPLING OF UNDERGROUND EXPLOSIONS
Personal Author(s):
LATTER,ALBERT L
Report Date:

02 Nov 1960

Media Count:

1 Page(s)

Report Number(s):

ARPA-91 59

Contract Number:

AF49 638 710

Monitor Series:

91 59

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion is presented concerning the implications of, and questions raised by, the cowboy underground detonations with chemical explosives. These experiments verified the correctness of the theory that explosions in a large cavity experience a decoupling effect, that is, the resulting seismic signals are muffled. The Cowboy tests left certain problems still to be solved (e.g., the relationship between cavity volume and depth and the decoupling factor, and the possibility that chemical explosions produce significantly different curves from nuclear explosions under the test conditions).

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0636039

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BASE-DEPOT REQUISITIONING PIPELINE TIMES.

Personal Author(s):

Heuston, Annette

paulson,R M

Rosenthal,A H

Report Date:

01 Nov 1960

Media Count:

132 Page(s)

Report Number(s):

RM-2656

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The study examines Air Force base-depot requisitioning pipeline times by segment, for selected ZI and overseas bases. It covers requisitions made during a six-week sample period in 1959, and shows that 69 per cent of them did not meet standards of resupply performance. As a result, a greater stock of serviceable assets was in the resupply pipeline than was planned for. The quantity of stock necessary to support the resupply pipeline is one of the dominant uncertainties in the computation of requirements for all Air Force spare parts. Until recently, only average pipeline figures were available. The study was undertaken to provide more pipeline data, and in greater detail, than were currently available. The authors arranged to have pipeline data collected from four ZI bases, three overseas bases, and three overseas rotational squadrons, with the help of base personnel and the cooperation of the four commands under which the various bases were operating. Data were also collected from the two supporting depots, three LOG-COM (Logistics-Communications) relay stations, and the Tulsa Network Control Center. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0419903

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COMPATIBILITY OF MILITARY AND COMMERCIAL AIRLIFT REQUIREMENTS,

Personal Author(s):

Summerfield, J R

Report Date:

21 Sep 1960

Media Count:

15 Page(s)

Report Number(s):

P2076

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616664

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF THE DECISION-MAKING FUNCTIONS OF A SIMULATED AIR DEFENSE DIRECTION CENTER.

Descriptive Note:

Revised ed.,

Personal Author(s):

Sweetland,A

Haythorn,W W

Report Date:

20 Sep 1960

Media Count:

26 Page(s)

Report Number(s):

P-1988

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Two crews from the Air Defense Command were charged with the responsibility of defending the United States against hostile attack and then exposed to high stress situations in a simulated manual Air Defense Direction Center. Their responses were analyzed to determine what, if any, characteristic response patterns emerged. The following were suggested by the analysis of the data: (1) When reality

is too complex to deal with first-hand, a man-machine system will construct a model of reality. This model is continuously modified by the system (to take into account changes in reality and changes in proficiency) but the modifications always reflect the charged responsibility. (2) The model of reality is then evaluated to determine the best of several possible responses. Responses are selected in terms of which most effectively meets the charged responsibility. (3) A system, apparently unconsciously, operates at a level of effort that remains relatively constant for the job at hand and will exceed this level rarely and for short intervals only. (4) A system apparently orders reality on a subjective list ranging from 'immediate response is mandatory' to 'no response is necessary' and then responds reading from the top of the list to the point of the system level of effort. (5) The major effect of stressing the system is to provoke a more careful culling of the list rather than increase the level of effort. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0420929

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OPERATIONAL DESIGN CRITERIA FOR MISSILE GROUND SYSTEMS: READINESS TESTING,

Personal Author(s):

Firstman, Sidney I

Report Date:

15 Sep 1960

Media Count:

27 Page(s)

Report Number(s):

P2112

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This document presents a study on operational research of readiness testing. Readiness testing is a ground operation that covers tests performed regularly for the purpose of detecting failures that have occurred in the missile and launch equipment. An important adjunct to criteria for physical characteristics of readiness-testing equipment are statements derived from operational analyses that

specify (a) what tests are best done by each testing method, (b) the best test frequencies, and (c) the preferred equipment locations for each test; these are operational design criteria. Different testing methods--check periodically, monitor continuously, leave alone--and equipment locations--van, silo, missile--could yield different readiness probabilities for each missile function. These probabilities depend on the particular missile's characteristics (test-point availability, failure rates, modes of operation, etc.) and test equipment characteristics (test completeness, accuracy, failure rates, etc.). (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0641156

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE IMPORTANCE OF INDIVIDUAL INDUSTRIES FOR DEFENSE PLANNING,

Personal Author(s):

BEAR,D V T

Clark,P G

Report Date:

15 Sep 1960

Media Count:

24 Page(s)

Report Number(s):

P-2093

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The object of the analysis described in this paper is to examine, as a guide to sensible peacetime defense preparations, plausible supplies and demands in the U.S. economy after a nuclear war. The presumptions undertaken for the analysis are that deterrence might fail, that the outcome of a future general war would not necessarily be mutual suicide, that the ability to recover economically remains relevant for defense policy, and that individual industries may differ in importance for this objective.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0654634

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL EQUATIONS IN THE THEORY OF DYNAMIC PROGRAMMING--XII: COMPLEX OPERATORS AND MIN-MAX VARIATION,

Personal Author(s):

Bellman, Richard

Lehman, R Sherman

Report Date:

01 Sep 1960

Media Count:

19 Page(s)

Report Number(s):

P-2083

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Previous papers have applied the functional equation approach of dynamic programming to the study of variational problems associated with the Sturm-Liouville equation of second order with real coefficients. In this way, it was possible to obtain the dependence of the Green's function upon the interval length. From this was obtained the corresponding dependence of the characteristic values and the characteristic functions, and similar results for vector-matrix systems. To apply the same general techniques to the study of equations with complex coefficients, min-max variation was used. It is shown that this method can be applied rigorously.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0613720

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAN-MACHINE SIMULATION PROGRESS,

Personal Author(s):

GEISLER,M A

Report Date:

23 Aug 1960

Media Count:

13 Page(s)

Report Number(s):

P-2086

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses a technique which has been largely developed through use in logistics research. The technique has been applied to studies of large logistics management systems in which decision-making under uncertainty is required. The procedure is to build man-machine simulations, and to use them in experimental situations. The output is a description of decision rules, information flows, and an organizational structure that improve the cost and effectiveness of the logistics system. Man is used in these simulations for his learning, adaptiveness, and flexibility. Three such large-scale experiments were conducted in the past three years. The technique is being further developed so as to be practicable with a wider range of problems, by providing more aggregative and less costly simulations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0639560

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MEASUREMENTS OF EFFECTIVE RADIATED POWERS.

Personal Author(s):

LUSTGARTEN,M N

Report Date:

17 Aug 1960

Media Count:

22 Page(s)

Report Number(s):

P-2078

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It can be seen that for signal density predictions and tests for conformance with statistical specifications, the analytic model described in this paper seems quite adequate. A field measurement technique could employ pulse counting and record the required pulse patterns directly. If many runs are made, the standard deviations could also be included. Thus, the patterns could be placed on tape in a form suitable for use by a computer programmed to solve signal density problems. It is of little consequence to the model whether a peak or a null appears at a specific angle. Detailed pattern plots would not be required, alleviating the requirement for precision in determining azimuth angles. Therefore, measurement accuracy of this parameter seems not to be markedly significant for signal density predictions, simplifying the measurement technique and the method for data presentation. If azimuth accuracy is preserved, the measurements will be useful to engineers involved in siting problems and the data can still be converted to the form described in this paper. Finally, the statistical model provides the system planner with a definite quantitative estimate of the confidence that can be placed on the measured data. This will provide a sound engineering basis for equipment design and will also point clearly toward those areas where improved measurement techniques and measurement equipment are required. Incidentally, it will also indicate where relatively crude techniques (whose errors are known) are acceptable. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0634198

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OPTIMAL REPLACEMENT AND INSPECTION OF STOCHASTICALLY FAILING EQUIPMENT,

Personal Author(s):

Jorgenson, D W

Radner, R

Report Date:

16 Aug 1960

Media Count:

41 Page(s)

Report Number(s):

P-2074

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In preparedness-type models of single-part equipment, with an objective of maximizing the proportion of the time that the system is in a good, ready state, optimal replacement policies are periodic, and the optimal period is easily computed. The same is true of inspection, if the part has an exponential distribution of time to failure. In the case of equipment with several parts, the possibility of opportunistic maintenance arises, to take advantage of 'economies of scale' in maintenance actions. In the simple cases we have discussed, concerning equipment with two parts, one of which is monitored, the optimal policies are of the (n, N) type, which includes the periodic type as a special case. Models with more than two parts appear to present serious analytical difficulties, if one wishes to take account of economies of scale. It is likely, furthermore, that optimal policies in such cases would typically be too complicated for practical use. It may turn out, therefore, that policies of the (n, N) type will provide good practical solutions to problems involving many-part systems. Much work remains, of course, in developing techniques for optimizing even within this simple class. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0613716

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLVING THE CHEMICAL EQUILIBRIUM PROBLEM USING THE DECOMPOSITION PRINCIPLE,

Personal Author(s):

Dantzig,G B

Shapiro,Marvin

Report Date:

10 Aug 1960

Media Count:

23 Page(s)

Report Number(s):

P-2056

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The determination of the equilibrium composition of a gaseous mixture is equivalent to the determination of the number of moles of each molecular species present that minimize the total free energy of the mixture. The convex function for free energy as given by Gibbs is minimized subject to the constraints of the mass-balance equations for the mixture. A solution to the problem is given using a version of the decomposition procedure for linear programming. A mathematical description of the method of solution as well as the computational algorithm as programmed for the IBM 704 with some results are given. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0634333

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FUTURE OF DATA PROCESSING IN STATE GOVERNMENT,

Personal Author(s):

HEARLE, Edward F R

Mason,Raymond J

Report Date:
08 Aug 1960
Media Count:
11 Page(s)
Report Number(s):
P-2062-RC
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0726039
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) The Effect of Maintenance and Reliability on the Operational Effectiveness of an Interceptor Squadron,
Personal Author(s):
LaVallee,R S
Stoller,D S
Report Date:
02 Aug 1960
Media Count:
53 Page(s)
Report Number(s):
P-2053
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:
(U) The report analyzes the data collected during a squadron operational test in the area of maintenance and reliability, and their effect on flying operations. Although this data is old, the study having been made more than fifteen years ago, the limited availability of this type of data makes it worthwhile to have it available in an unclassified manner even though the aircraft is obsolete and no

longer in the Air ORCE INVENTORY5 The study results are primarily useful in indicating order-of-magnitude effects and the importance of certain parameters on maintenance and reliability. Also included is a discussion of the test environment, the data collection procedures, and the accuracy obtained. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0627206

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/627206.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD627206>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE VIOLATION OF ARMS-CONTROL AGREEMENTS: DETERRENCE VS. DETECTION

Personal Author(s):

Ikle, Fred C

Report Date:

01 Aug 1960

Media Count:

32 Page(s)

Report Number(s):

RM-2609-ARPA

XD-DARPA

Contract Number:

AF 49(638)-710

ARPA ORDER-91-59

Monitor Series:

DARPA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The principle is declared that study is needed not only into what a violator of an arms-control agreement may do to avoid detection, but also what he may do to escape his penalty. History shows that world opinion is an ineffective sanction for deterring the violation of agreements. An effective sanction depends, above all, on governmental decisions by the injured countries, but a democratic government has to overcome a number of obstacles before it can decide to react effectively to an evasion. One of the most effective deterrents to violation is the threat of a general increase in the military effort of the injured country. It is not enough merely to restore the situation that would exist had it not been for the arms-control agreement. A number of measures for deterring evasions ought to be pursued to make it more likely that sanctions will be applied and to make sanctions seem more threatening. Political measures would be helpful to make sanctions seem more certain. They would include such things as enabling legislation to facilitate executive action, parliamentary arrangements to publicize evasions, and interallied contingency plans for dealing with a violation if it occurs. To make sanctions seem more effective, technical and military preparations are needed so that a violator cannot obtain a technological or strategic lead.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417826

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A PUBLIC OPINION GAME,

Personal Author(s):

Davison, W P

Report Date:

25 Jul 1960

Media Count:

16 Page(s)

Report Number(s):

P2042

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422571

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE PROBLEM OF BALLISTIC MISSILE DEFENSE,

Personal Author(s):

Holbrook, R D

Gross, J F

Report Date:

25 Jul 1960

Media Count:

24 Page(s)

Report Number(s):

P2046ARPA

Contract Number:

AF49 638 710

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The greater part of this paper discusses technical problems and the questions of whether active missile defense can be technically, economically, or operationally feasible. These questions are likely to have different answers depending on what segment of the United States is to be defended (cities; airfields; hard missile sites; hardened command posts; etc.), the purpose for which defense is undertaken (to prevent or limit damage; to buy time; to raise enemy force requirements; etc.), and how well the defense system is supposed to perform under the variety of circumstances which could arise.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417651

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE COMMERCIAL AIRCRAFT BOMB HAZARD: A POSSIBLE ANSWER,

Personal Author(s):

Hill, L S

Report Date:

13 Jul 1960

Media Count:

5 Page(s)

Report Number(s):

Rept. no. P2037

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A serious hazard to commercial air transportation and with national security implications is the threat of explosives carried aboard by the passenger in his baggage. One possible solution to the baggage danger is based upon randomizing of luggage; the passenger and his bags would not be carried on the same airplane or if so, not to the traveler's knowledge. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0241636

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:
(U) SURVEY OF RADIOMETRIC QUANTITIES AND UNITS
Personal Author(s):
VIEZEE, W
Report Date:
12 Jul 1960
Media Count:
35 Page(s)
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0243215
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) AN ALGORITHM FOR THE MIXED INTEGER PROBLEM. NOTES ON LINEAR PROGRAMMING AND
EXTENSIONS. PART 54
Personal Author(s):
GOMORY, RALPH
Report Date:
07 Jul 1960
Media Count:
17 Page(s)
Report Number(s):
RM-2597
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616663

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHY ARE THE CHINESE NERVOUS.

Descriptive Note:

Revised ed.,

Personal Author(s):

Halpern,A M

Report Date:

05 Jul 1960

Media Count:

33 Page(s)

Report Number(s):

P-1987

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper describes the development by Chinese Communist leaders, between October 1, 1959, and April 1, 1960, of an analysis of and a declared policy concerning the current international situation, with particular reference to the prospects for peaceful coexistence. Chinese Communist conditional acceptance of a role in disarmament negotiations is analyzed in this context. Areas of difference between the Soviet and Chinese Communist positions are identified and an estimate is made of their significance. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224292

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE FINANCING OF PUBLIC INVESTMENT IN COMMUNIST CHINA,

Personal Author(s):

Mah, Feng-hwa

Report Date:

30 Jun 1960

Media Count:

53 Page(s)

Report Number(s):

P-2031

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0242708

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANALYSIS OF THE DELAY-AND-COMPARISON CIRCUIT FOR RADAR RECEIVERS IN THE PRESENCE OF INTERFERENCE

Personal Author(s):

MARCUS, M

Report Date:

30 Jun 1960

Media Count:

61 Page(s)

Report Number(s):

RM-2375

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616505

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ALGORITHM FOR THE MIXED INTEGER PROBLEM,

Descriptive Note:

Revised ed.,

Personal Author(s):

Gomory,Ralph

Report Date:

23 Jun 1960

Media Count:

14 Page(s)

Report Number(s):

P-1885

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An algorithm is given for the numerical solution of the 'mixed integer' linear programming problem, the problem of maximizing a linear form in finitely many variables constrained both by linear inequalities and the requirement that a proper subset of the variables assume only integral values. The algorithm is an extension of the cutting plane technique for the solution of the 'pure integer' problem. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616672

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMIZING A PRELAUNCH CHECKOUT,

Personal Author(s):

Firstman, Sidney I

Voosen, Bernard J

Report Date:

22 Jun 1960

Media Count:

24 Page(s)

Report Number(s):

P-1997

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

22 - DOCUMENT ILLEGIBLE

Abstract:

(U) This paper addresses the problem of making design decisions for time-limited checkouts of ballistic missiles and develops (a) quantitative criteria for the value of inclusion of individual checks in the checkout, (b) an expression for the required efficiency of the checkout equipment, and (c) a mathematical method for determining the content of a theoretically optimum checkout. A brief example is included. The method developed can also be used to ascertain the launch confidence of existing systems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604598

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMAND AND SUPPORT SYSTEMS: PROBLEMS AND CAPABILITIES,

Personal Author(s):

Jones,W M

Report Date:

20 Jun 1960

Media Count:

9 Page(s)

Report Number(s):

B-145-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The work done and the types of problems faced in four computer routines which are applicable to command and control systems are described. The routines involve the planning functions of the Strategic Air Command.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224289

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Weapon System Cost Sensitivity analysis as an Aid in Determining Economic Resource Impact.

Report Date:

15 Jun 1960

Media Count:

1 Page(s)

Report Number(s):

P-2021

Report Classification:

Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0247383
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) DETERMINING CHECKOUT INTERVALS FOR SYSTEMS SUBJECT TO RANDOM FAILURES
Personal Author(s):
KAMINS, MILTON
Report Date:
15 Jun 1960
Media Count:
85 Page(s)
Report Number(s):
RM-2578
Contract Number:
AF-49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0610835
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:

(U) APPROPRIATE ROLES AND SOME LIMITATIONS OF MAN AS A GUIDANCE COMPONENT,

Personal Author(s):

Bailey,H H

Report Date:

14 Jun 1960

Media Count:

18 Page(s)

Report Number(s):

P-2020

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616674

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON UNIVERSITY COURSES IN MATERIALS FOR THE ENGINEER,

Personal Author(s):

Micks,William R

Report Date:

08 Jun 1960

Media Count:

13 Page(s)

Report Number(s):

P-1999

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The courses should concentrate on the engineering methods and on fundamentals to the exclusion of demands for the specialization.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616596

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REDUCTION OF DIMENSIONALITY, DYNAMIC PROGRAMMING, AND CONTROL PROCESSES.

Descriptive Note:

Rev. ed.,

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Report Date:

03 Jun 1960

Media Count:

12 Page(s)

Report Number(s):

P-1964

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A major difficulty in the way of a successful systematic approach to the study of control processes by way of the theory of dynamic programming is the occurrence of processes having state vectors of high dimension. However difficult the problem is for systems ruled by a finite set of differential equations, it is several orders of magnitude more complex for systems of infinite dimensionality and for systems with time lags. By combining a technique presented earlier for dealing with finite-dimensional systems and various methods of successive approximations and quasilinearization, certain classes of control processes associated with infinite dimensional systems can be treated. The ideas are illustrated by discussing control of a system involving a time lag and control of a thermal system.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616671

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELIABLE DIGITAL COMMUNICATIONS SYSTEMS USING UNRELIABLE NETWORK REPEATER NODES,

Personal Author(s):

Baran,Paul

Report Date:

27 May 1960

Media Count:

27 Page(s)

Report Number(s):

P-1995

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A communications network that utilizes a moderate degree of redundancy to provide high immunity from the deleterious effects of damage of relay centers is described. The degree of redundancy needed is shown to be determined primarily by the amount of damage expected. Curves indicating the optimum degree of redundancy are shown and the distribution of performance under different damage patterns described. The redundancy desired is shown to vary as a function of the station position in the network, the stations at the fringe of the network requiring more redundancy than the inside stations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0417194

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TOWARDS A NEW SYSTEM FOR ALLOCATING THE COST OF CAPACITY,

Personal Author(s):

Berman, E B

Report Date:

27 May 1960

Media Count:

14 Page(s)

Report Number(s):

P2001

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A concept of capacity cost is presented. In this new capacity cost system a requirement for an additional unit of capacity does not lead either to no cost if the unit is already available or to the full cost of building an additional unit if it is not already available. The former event implies a cost because it advances the time when we should expect to construct an additional unit of capacity. The latter event offers a savings to offset the full cost of constructing a unit of capacity in the form of probability that the unit we construct now would have been needed for the next generation anyways. We use the term "capacity" in a functional sense; thus we include in capacity, facilities, support equipment, support organizations, and personnel which have significant initial costs and to which the concept of capacity therefore appertains. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606906

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/606906.pdf

Size: 679 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD606906>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) IS WATER DIFFERENT

Personal Author(s):

DeHaven, J C

Report Date:

25 May 1960

Media Count:

18 Page(s)

Report Number(s):

P-1349-RC

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) Water is not different from other resources in most of the ways it is often discussed. It has no unique, magical properties by itself to create wealth, nor to cause the development of a region. Water is different in that features of its supply, custom, and the development of water law have placed it largely in the public domain. Consequently, the development of new supplies and its distribution is often the responsibility of government agencies. For this reason, special problems arise in the division of the available supply among user categories and between regions. Decisions in these matters are often made in the political arena instead of in the market place as with most other resources. Even so, it is important that the citizen-taxpayer become informed of the economic aspects of water supply. Otherwise, water development decisions by government agencies may result in the wasteful investment of our other resources to produce more water. Large dams and lengthy aqueducts for transferring water between regions are not the only alternative sources of increased water for our region. In fact, they may often be the most costly.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616673

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SECURITY OF SUPPLY AND ENERGY POLICY IN WESTERN EUROPE,

Personal Author(s):

Lubell, Harold

Report Date:

20 May 1960

Media Count:

37 Page(s)

Report Number(s):

P-1998

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Conclusion: The switch to oil in the countries which initially industrialized themselves on an energy base of coal is world-wide, and both the United States (where the trend has been set for some time) and the USSR (where the latest plans for energy production call for a rapid development of oil and gas rather than coal) are held up as models for the future pattern of energy consumption in Western Europe. What is overlooked is the obvious fact that both the United States and the USSR have a choice among energy sources available within their borders and directly under their own control. Western Europe does not have the same choice.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616667

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MATHEMATICAL FORMULATION OF VARIATIONAL PROCESSES OF ADAPTIVE TYPE,

Personal Author(s):

Bellman,Richard

Report Date:

19 May 1960

Media Count:

26 Page(s)

Report Number(s):

P-1991

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The questions discussed belong to two fields which formerly were quite disjoint, the classical theory of probability and the classical calculus of variations. That there is now considerable overlap is due to the rise in scientific interest in the field of control processes. Although it is only within the last few years that the theory of feedback control has penetrated the academic curriculum and become a respectable member of the mathematical community, the conventional formulation is already far outmoded. In order to treat current and future problems of any significance, it is absolutely essential to introduce stochastic elements. These, however, enter in entirely novel ways, not in the fairly well understood fashion of conventional stochastic processes, but in connection with 'learning processes,' or adaptive processes. It is shown that the functional equation technique of dynamic programming can be used to treat adaptive control processes, and that continuous processes can be defined in terms of the discrete versions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616583

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MACHINE TRANSLATION OF RUSSIAN PREPOSITIONS,

Personal Author(s):

Harper,K E

Report Date:

19 May 1960

Media Count:

27 Page(s)

Report Number(s):

P-1941

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the development of a program for Russian-English machine translation a substantial amount of information was generated relative to the translation of Russian prepositions. Empirical studies, based on approximately 240,000 running words of Russian physics texts, reveal the extent of this translation problem in these texts. The contextual determinants of the translation of prepositions were studied: for each occurrence of a multivalent preposition the syntactically related items (dependent and governor) were machine listed. The effect of these items on the translation of the preposition is summarized.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

AD0616668

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIMITS FOR STABLE NEAR-CIRCULAR PLANETARY OR SATELLITE ORBITS IN THE RESTRICTED
THREEBODY PROBLEM,

Personal Author(s):

Dole,S H

Report Date:

18 May 1960

Media Count:

24 Page(s)

Report Number(s):

P-1992

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Abstract:

(U) In the vicinity of two massive bodies rotating in circles around their common center of mass there are regions in which near-circular orbits of a third body are stable and other regions in which near-circular orbits are unstable. Expressions for calculating the limiting radii of the regions where stable near-circular orbits can exist are developed from Jacobi's integral to the equations of motion of a particle and computed quantitative values for these radii are given in graphical and tabular form for mass-ratios from 10 to the minus 8th power to 0.5. An example is given of the application of these limits to an idealized Earth-Moon system (mass ratio, 0.012128563). (Author)

Abstract Classification:

Unclassified

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616666

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN AIDED ADAPTIVE CHARACTER READER FOR MACHINE TRANSLATION OF LANGUAGES,

Personal Author(s):

Baran,Paul

Estrin,Gerald

Report Date:

17 May 1960

Media Count:

45 Page(s)

Report Number(s):

P-1990

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An elementary procedure for the synthesis of a character recognition device based upon a learning experiment is described. Utilizing information derived from a significant sample of the set of characters to be read and given identification of the samples by a human operator, a computer defines a set of 'filters.' These filters may then be used to transform unknown characters having similar type characteristics. During the recognition process a probability matrix for each character in the alphabet is used to compute a figure of merit for the hypothesis that an unknown character is the same as a known character. It is shown that this elementary model might adequately serve for construction of a fast input device for a language translation machine if it were able to make use of frequency distribution characteristics of the dictionary. A possible implementation with a raw character reading rate of up to 500 characters a second appears feasible. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616665

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DIGITAL SIMULATION OF AN AIDED ADAPTIVE CHARACTER READING MACHINE,

Personal Author(s):

Baran,Paul

Estrin,Gerald

Report Date:

17 May 1960

Media Count:

25 Page(s)

Report Number(s):

P-1989

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A pattern recognition system utilizing an initial man-machine learning phase was simulated on an IBM 709 computer. Transformations on a deformed set of 48 samples of each of ten numerals were used to form separation filters, while a second set of 480 similarly varied numerals served as the 'unknown' characters which were examined. Measured probability density distributions of the inked areas of all characters are established, and a weighted stencil or filter is created to distinguish each character relative to the possible set of characters. The numerical experiment demonstrated the extent to which the actual value of the best 'score of match' between the unknown and each character in the set provided confidence in recognition. Whenever the best score is too low, it is possible to call for more complex processes to aid recognition permitting the construction of recognition systems of greater accuracy than the basic reading mechanism. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0241134

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INDEXES OF SOVIET INDUSTRIAL OUTPUT. VOLUME I

Descriptive Note:

Research memo.

Personal Author(s):

KAPLAN,NORMAN M

MOORSTEEN,RICHARD H

WAINSTEIN,ELEANOR S

Report Date:

13 May 1960

Media Count:

190 Page(s)

Report Number(s):

RM-2495-Vol-1

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616406

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CONTEXTUAL STUDY: A STRUCTURED APPROACH TO THE STUDY OF POLITICAL AND MILITARY ASPECTS OF LIMITED WAR.

Descriptive Note:

Revised ed.,

Personal Author(s):

Ellis,J W ,Jr

Greene,T E

Report Date:

10 May 1960

Media Count:

21 Page(s)

Report Number(s):

P-1840

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Study of military problems in limited war by conventional techniques of systems analysis or operations analysis is hampered by the dominating effect of nonquantifiable variables, such as political factors. Such variables interact with the military factors in a complex fashion: the relation is dynamic, so that political and military problems cannot be separated, and it changes continually throughout the course of a limited war. Static assumptions regarding political constraints form unreliable boundary conditions within which to consider desired military tactics or weapons characteristics. A structured analytical method termed contextual study is suggested, whereby the military and political factors of the environment of a limited war are considered simultaneously throughout a campaign or series of campaigns. Advantages and limitations of the method and distinctions between it and operational war gaming are discussed. Applications to other types of problems than limited war--problems involving close interaction among quantifiable and nonquantifiable factors--are suggested. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616500

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECT OF A TRANSVERSE MAGNETIC FIELD ON THE ESCAPE SPEED OF A CONDUCTING FLUID.

Descriptive Note:

Revised ed.,

Personal Author(s):

Greifinger, Carl

Report Date:

09 May 1960

Media Count:

9 Page(s)

Report Number(s):

P-1875

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this note was to point out two things: (1) for a given initial ratio of the magnetic pressure to the hydrodynamic pressure in the conducting fluid, the escape speed is not uniquely defined, but depends on the magnetic pressure in the vacuum into which the fluid is expanding; and (2) the integrals appearing in the generalized Riemann invariants can be evaluated analytically.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616383

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MEASURING MISSILE RELIABILITY IN PRE-LAUNCH ENVIRONMENTS.

Descriptive Note:

Revised ed.,

Personal Author(s):

STOLLER,David S

Report Date:

09 May 1960

Media Count:

22 Page(s)

Report Number(s):

P-1810

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper examines some of the problems involved in measuring missile reliability during its pre-launch phase. This is an important problem for three reasons: (1) a missile typically is exposed to many kinds of operating environments over long periods of time before it is launched; (2) a missile's reliability history in its prelaunch operating environments is an index of its in-flight reliability; and (3) the major cost of a missile weapon system derives from the consequences of its pre-launch reliability behavior.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616661

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BASIC PRINCIPLES AND TECHNICAL VARIATIONS IN SENTENCE-STRUCTURE DETERMINATION,

Personal Author(s):

HAYS,D G

Report Date:

09 May 1960

Media Count:

21 Page(s)

Report Number(s):

P-1984

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Comparison of alternative methods of sentencestructure determination can take one method as a base and show the changes required to convert it into another. Basic principles of the RAND method include (i) isolation of grammatic detail from the structure of the computer program and (ii) postulation of a certain word-order rule. Technical variations in the order of establishment of connections and the procedure used for testing agreement could make the RAND method more similar to others now in use, and might improve its accuracy. Restructuring and the use of context are noted as additional types of variation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616660

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MODEL OF ERROR BURST STRUCTURE IN DATA TRANSMISSION,

Personal Author(s):

Mertz,Pierre

Report Date:

05 May 1960

Media Count:

29 Page(s)

Report Number(s):

P-1983

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An earlier model of error distributions in data transmission circuits assumed errors to come in bursts. The bursts consisted of periods of high error probability, and for simplicity were assumed of equal durations. This is successful for some engineering purposes, but otherwise over-simple. The present proposal assumes a distribution of burst durations that follows recent experimental data. It is bi-modal, and consists of a proportion of 1-bit bursts superimposed on a 'triangular' continuous distribution. Some analysis shows the equivalence of this model with equal duration bursts, when the constant duration is suitably chosen. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224286

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ECONOMIC DEVELOPMENT, RESEARCH AND DEVELOPMENT, POLICY MAKING: SOME COVERGING VIEWS,

Personal Author(s):

Hirschman, Albert O

Lindblom, Charles E

Report Date:

04 May 1960

Media Count:

28 Page(s)

Report Number(s):

P1982

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0241637

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AIRCRAFT COMPARTMENT DESIGN CRITERIA FOR THE ARMY DEPLOYMENT MISSION

Personal Author(s):

SHARPE, W F

Report Date:

01 May 1960

Media Count:

46 Page(s)

Report Number(s):

RM-2566

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616659

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARATIVE STUDY OF PREDICTION TECHNIQUES,

Personal Author(s):

BROWN, Bernice B

Report Date:

29 Apr 1960

Media Count:

33 Page(s)

Report Number(s):

P-1980

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Methods for improving the prediction of demand, specifically demand for aircraft spare parts, are sought where the prediction is based on an estimate of the underlying pattern of demands per program element. Seven prediction techniques were compared: (1) division of the total number of demands by number of flying hours in the experience period; (2) the demands are used to enter a table giving the upper 90% confidence level for the mean of a Poisson variable; (3) a nonparametric Poisson technique using as a constant the value of the normal deviate for the 90% confidence interval; (4) a technique using an equation similar to that used in (3); (5) an adaptation of the minimum Normit Chi-Square method (J. Berkson, 'Tables for use in estimating the normal distribution function by Normit analysis,' Biometrika, 44:411 (1957)); (6) a technique similar to (5) but using the transformation $\log(1 + \text{age})$; and (7) the actuarial method of the Air Force for predicting engine failures (T. O. 00-25-128 of April 18, 1958).

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

ADF630438

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A Comparison of the Theoretically Possible And Actual Procedures Used in Problem Solving.

Descriptive Note:

Translation,

Personal Author(s):

Zakharov,A H

Report Date:

28 Apr 1960

Media Count:

20 Page(s)

Report Number(s):

T-126

SBI-AD-F630 438

Monitor Series:

AD-F630 438

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Distribution Statement:

Announcement only; not available from DTIC. For availability information contact: Rand Corporation, Publications Department, 1700 Main Street, Santa Monica, CA 90406.

Abstract:

(U) In this study, based on the methodology Whitfield proposed, the theoretically possible procedures of problem solving are compared with solutions obtained by subjects in experiments. Problems solvable by means of trial were selected for the comparison. Their solution process is separated into clearly defined stages - individual trials. Each trial done (in theoretically possible solutions), whether or not it is entirely successful, approaches a final solution. In the actual solution, generally speaking, there can occur trials which do not approach a solution; i.e., do not give the solver any new data, or, shall we say, do not give him any new information. Summarizing, it is possible to say the following: (1) The psychological difficulty in problem solving presented in the given experiments varies as a function of the nature of the information coming to the solver; it considerably increases when this information comes to him in parts and not as a whole. (2) An increase in psychological difficulty is manifested with complete or partial non-use (loss) of information necessary for the solution. In connection with this, the problem is solved by using a larger quantity of trials than is theoretically necessary. (3) The fundamental reason for the information loss lies in the use of inadequate procedures for solution, having become complicated in the subject's past experience in the solution of problems of another type.

Abstract Classification:

Unclassified

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0613003

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UNCERTAINTIES IN OPERATIONS RESEARCH,

Personal Author(s):

Hitch,Charles

Report Date:

25 Apr 1960

Media Count:

14 Page(s)

Report Number(s):

P-1959

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616658

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPROXIMATE INVESTIGATION OF THE EFFECT OF BOUNDARY LAYER CONTROL PUMPING ON
POWERPLANT PERFORMANCE,

Personal Author(s):

Kirkwood,T F

Report Date:

25 Apr 1960

Media Count:

7 Page(s)

Report Number(s):

P-1979

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A first-order analysis is described of the effects of boundary layer bleed pumping on the performance of turbojet and turboprop powerplants.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616588

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DISSIPATION FUNCTIONS AND INVARIANT IMBEDDING, I.

Descriptive Note:

Revised ed.,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Wing,G Milton

Report Date:

22 Apr 1960

Media Count:

6 Page(s)

Report Number(s):

P-1952

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In a series of papers dating from 1956, the authors have used the theory of invariant imbedding to derive a variety of nonlinear functional equations for the description of radiative transfer, neutron transport, diffusion and heat conduction, scattering and random walk, and wave propagation. In this

paper a new method is presented for establishing the existence of solutions of these equations in the cases where no creation of matter is involved. This method is based upon the introduction of a new class of physically important functions, the dissipation functions. Combining these new functions with the functions utilized in the past, the reflection and transmission functions, we easily obtain a basic conservation relation upon which all else hinges. The uniqueness proofs follow conventional lines.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616655

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FAR-FIELD BACK-SCATTERING FROM A CONCAVE CORNER OF A BODY OF REVOLUTION,

Personal Author(s):

Raymond, Joseph L

Report Date:

21 Apr 1960

Media Count:

20 Page(s)

Report Number(s):

P-1976

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The monostatic head-on radar cross section formed by a concave ring singularity has been calculated in the limit of small wave lengths. The solution is based upon Oberhettinger's treatment of the diffraction of plane waves by an infinite wedge. The techniques of solution are chiefly those developed by Siegel when he derived the cross section of a convex ring singularity. The geometry of a concave ring singularity occurs frequently with bodies of revolution when a cylinder is followed by a conical flare or with biconic configurations where a sharp cone is followed by a blunt cone. The theoretical small-wave length treatment is for wedges of all angles. With Siegel's solutions, the cross section of a ring singularity can be predicted for wedges having included angles of from zero to 360 degrees. For geometrically

similar concave and convex wedges when the wedge angle is slightly different from a straight line (e.g., 180 degrees), the present concave solution gives a radar echo identical in the first derivative to the convex solution of Siegel, as would be expected from geometric considerations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616656

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GEOMAGNETIC CONTROL OF THE VAN ALLEN RADIATION BELTS,

Personal Author(s):

Vestine,E H

Report Date:

21 Apr 1960

Media Count:

21 Page(s)

Report Number(s):

P-1977-NSF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The integral invariants of charged-particle motion in the geomagnetic field discussed by Van Allen and others are evaluated. Calculations based on Finch and Leaton's coefficients for 1955.0 ('M. Nat. R. Astron. Soc.,' Geophysical Supplement, 7:314-317 (1957)) are used to describe the height and direction of longitudinal drift of the trapped radiation. The geomagnetic annual and sunspot variations are discussed in terms of the fields of drifting currents in the radiation belts. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616652

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON STABILITY, AND THE BEHAVIOR ASSUMPTIONS OF HARROD-TYPE MODELS,

Personal Author(s):

Nelson,Richard R

Report Date:

20 Apr 1960

Media Count:

24 Page(s)

Report Number(s):

P-1971

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616654

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING, SEQUENTIAL ESTIMATION AND SEQUENTIAL DETECTION PROCESSES,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Middleton,David

Report Date:

20 Apr 1960

Media Count:

7 Page(s)

Report Number(s):

P-1973

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some general sequential estimation and sequential detection processes are provided with an analytical formulation through use of the functional equation technique of dynamic programming. Some reductions which are useful from the computational viewpoint are indicated, and several applications to radar and communication system theory are sketched. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616653

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PRELIMINARY COMPUTATION OF PRESSURE AND TEMPERATURE BETWEEN 100 AND 800 KILOMETERS,

Personal Author(s):

Viezee, W

Report Date:

18 Apr 1960

Media Count:

21 Page(s)

Report Number(s):

P-1972

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Preliminary pressure and temperature data on the atmosphere between altitudes of 100 and 800 km are presented. Data on the density of the atmosphere taken from several sources serve as a basis for

deriving mean pressure and temperature. The accuracy of the latter depends on the estimate of molecular weights of the gas mixture at high altitudes. Departures from this mean are caused by geophysical effects originating in solar emanations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616651

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROBLEMS AND CONCEPTS OF GENERAL PLANETOLOGY,

Personal Author(s):

Dole,Stephen H

Report Date:

15 Apr 1960

Media Count:

36 Page(s)

Report Number(s):

P-1970

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The concept of treating planets as members of a general class of non-self luminous objects is introduced. Planets are shown to occupy the mass range roughly between 0.00001 to 10,000 earth masses (10 to the 23rd to 32d grams), objects above this mass range being stars and below this mass range being classified as meteoroids or asteroids. Planets are further classified into types as: (1) airless bodies; (2) planets with light atmospheres and (3) planets with massive atmospheres, the type being dependent on surface escape velocity and exosphere temperature. Some relationships among fundamental properties of planets are discussed: mean density vs. radius; atmospheric composition as a function of exosphere temperature and velocity of escape; and oblateness as a function of rotational velocity, mean density and internal density distribution. Some unresolved problem areas of general planetology are indicated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616597

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ERGODIC THEOREM,

Personal Author(s):

Bellman, Richard

Report Date:

11 Apr 1960

Media Count:

7 Page(s)

Report Number(s):

P-1966

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this note is to indicate how a simple lemma due originally to Fekete, and in generalized form to Polya-Szego, permits a simple derivation of some interesting ergodic theorems. We have already indicated some applications to dynamic programming.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616594

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LONG-RANGE CONSIDERATIONS IN DATA PROCESSING FOR STATE AND LOCAL GOVERNMENTS,

Personal Author(s):

Postley, John A

Report Date:

06 Apr 1960

Media Count:

7 Page(s)

Report Number(s):

P-1961-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to try to indicate the major impact of future applications of data processing in state and local government, and some of the developments which foretell this impact.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0615884

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN OUT-OF-KILTER METHOD FOR MINIMAL COST FLOW PROBLEMS.

Descriptive Note:

Revised ed.,

Personal Author(s):

Fulkerson, D R

Report Date:

05 Apr 1960

Media Count:

23 Page(s)

Report Number(s):

P-1825

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

22 - DOCUMENT ILLEGIBLE

Abstract:

(U) A method of solving minimal cost network flow problems is described. This method begins with any circulation, feasible or not, and an arbitrary pricing vector. A labeling procedure is then used to adjust 'out-of-kilter' arcs, that is, arcs that fail to satisfy the optimality properties. It is shown that the method terminates in a finite number of steps, and that in so doing, the status of no arc of the network (as measured by certain 'kilter numbers') is worsened at any step. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616589

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SINKIANG AND SINO-SOVIET RELATIONS,

Personal Author(s):

Whiting,A S

Report Date:

04 Apr 1960

Media Count:

21 Page(s)

Report Number(s):

P-1953

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616593

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME ELECTROSTATIC CLOUD-DROPLET COLLISION EFFICIENCIES,

Personal Author(s):

Sartor,J Doyne

Report Date:

04 Apr 1960

Media Count:

15 Page(s)

Report Number(s):

P-1960

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Recent electrostatic and hydrodynamic solutions to the two body problem of the forces on neighboring spheres are combined to obtain the motion of cloud droplets in a uniform electrostatic field. Collision efficiencies are obtained from the relative trajectories of one droplet with respect to another both with and without the electrostatic field. The collision efficiencies are compared to demonstrate the effect of electrostatic fields in the initial stages of droplet accretion. It is concluded that fields commonly observed in clouds can play an important role in the collision and coalescence of the droplets. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616592

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON THE DIRECTION OF HIGH AURORAL ARCS,

Personal Author(s):

Vestine,E H

Report Date:

04 Apr 1960

Media Count:

26 Page(s)

Report Number(s):

P-1957-NSF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The relationships between geomagnetic micropulsations and pulsations in auroral luminosity are considered. Several features of these are found to be compatible with the concept of drainage of trapped radiation in the region of the outer Van Allen radiation belt in the Western Hemisphere. Certain homogeneous auroral arcs noted by Stormer at height 200 km in central Norway have a mirror point for trapped particles computed to be below ground level in the south Indian Ocean, a region likely to need surveys of the earth's main field. The magnetic field gradients near the night time electrojets near the northern and southern auroral zones will change the sign of drift of auroral particles, so that electrons spiralling up or down the geomagnetic field lines may drift westward in some regions and eastward in others. The gradients of the transient electrojet fields may help in explaining many of the complex features of auroral forms, when aurora are formed by incoming charged particles. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616591

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) 'NTH COUNTRIES' AND DISARMAMENT,

Personal Author(s):

Ikle,F C

Report Date:

01 Apr 1960

Media Count:

17 Page(s)

Report Number(s):

P-1956

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Arguments and counter-arguments are presented with regard to the possibility of more and more countries acquiring nuclear weapons--the 'Nth Country' problem. Arms control and the cooperation of the major powers in the enforcement of an arms control agreement are suggested as possible solutions to the problem.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616585

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON PROGRAMMING A HIGHLY PARALLEL MACHINE TO BE AN INTELLIGENT TECHNICIAN,

Personal Author(s):

NEWELL,A

Report Date:

01 Apr 1960

Media Count:

52 Page(s)

Report Number(s):

P-1946

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper speculates on how to program a machine that is suitable for construction with microelectronic components to be an intelligent technician. The point of departure is from a class of machines described by J. H. Holland in a concurrent paper entitled, 'On Iterative Circuit Computers Constructed of Microelectronic Components and Systems.' These machines consist of a regular lattice of active modules, each possessing both processing and memory functions. The goal is a machine with the problem solving capabilities of a smart human technical assistant, and the volume processing capabilities normally associated with digital computers. This goal is chosen because it coincides with many current developments. After discussing the eventual capabilities desired and the most striking features of Holland's machines, the speculation proceeds by considering the basic organization for information processing. This is followed by briefer treatments of the organization for problem solving, supervision, interpretation and production. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616646

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYSIS OF POSSIBLE LUNIK III PICTURE HOAX,

Personal Author(s):

Davies,Merton E

Report Date:

01 Apr 1960

Media Count:

8 Page(s)

Report Number(s):

P-1969

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Speculations are made regarding the credibility of the charges of the 1960 magazine articles that the pictures of the back side of the moon taken by the Lunik III payload may have been faked. The suggestion is made that at the time that Lunik III broadcast its many pictures, it is likely that, because of the great distance and low transmitter power, the signal-to-noise ratio was too low that no two of the resulting pictures looked alike. Because of interference and noise the pictures would be distorted and blotchy. The best procedure in the presence of noise is to use a statistical approach and to determine, from many samples, the most likely shape and location of each formation. A composite picture was most likely made that would represent the best, or most probable, view of the back of the moon. The composite was then annotated with the names and descriptions of the physical features. The two other released pictures were retouched in such a way as to resemble this picture and at the same time illustrate typical results from each of the two lenses.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224317

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/224317.pdf

Size: 913 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD224317>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) On the Choice of Objectives in Systems Studies

Personal Author(s):

Hitch, Charles J

Report Date:

30 Mar 1960

Media Count:

18 Page(s)

Report Number(s):

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616590

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RUSSIAN LITERATURE ON ROCKET PROPELLANTS,

Personal Author(s):

KRIEGER,F J

Report Date:

25 Mar 1960

Media Count:

25 Page(s)

Report Number(s):

P-1954

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Because of their emphasis on science and technology, the Soviets bring to light the results of their scientific investigations in a wide variety of controlled publications. These include the popular press, as well as a multiplicity of scientific and industrial journals. Although the Soviets publish widely on combustion, detonation, explosion, and industrial explosives, their output of original material on rocket propellants is seriously limited by security restrictions. Nevertheless, examination of the Russian literature reveals (1) a thorough familiarity with Western developments, and (2) considerable research activity on both solid and liquid propellants of the conventional and nonconventional variety. Among the objects of special interest are pentaborane, ammonium nitrate, ozone, hydrogen superoxide, and frozen radicals. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616567

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CELESTIAL FRONTIERS,

Personal Author(s):

CLEMENT,George H

Report Date:

23 Mar 1960

Media Count:

20 Page(s)

Report Number(s):

P-1915

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616587

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CHINESE PEOPLE'S REPUBLIC AND THE BOMB,

Personal Author(s):

Kramish,Arnold

Report Date:

23 Mar 1960

Media Count:

8 Page(s)

Report Number(s):

P-1950

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616586

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON CONTROL OF LINEAR SYSTEMS WITH TIME LAGS

Personal Author(s):

Kramer,J D R ,Jr

Report Date:

22 Mar 1960

Media Count:

43 Page(s)

Report Number(s):

P-1948

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616561

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND GAUSSIAN ELIMINATION.

Descriptive Note:

Revised ed.,

Personal Author(s):

Lehman,R Sherman

Report Date:

21 Mar 1960

Media Count:

7 Page(s)

Report Number(s):

P-1906

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In a previous paper (On some applications of dynamic programming to matrix theory, Illinois J. Math., 1:297-301 (1957)), Bellman has shown that the functional equation technique of dynamic programming leads to an algorithm for solving linear equations when the matrix is a Jacobi matrix. The purpose of this note is to show that the algorithm is essentially the same as Gaussian elimination.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616416

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND MATHEMATICAL PHYSICS, I: PARTICLE PROCESSES.

Descriptive Note:

Revised ed.,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Wing,G Milton

Report Date:

21 Mar 1960

Media Count:

116 Page(s)

Report Number(s):

P-1858

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Using invariance principles in a systematic fashion, new analytic formulations are derived of the classical particle processes, those of transport theory, radiative transfer; random walk, multiple scattering, and diffusion theory, as well as new computational algorithms which seem well fitted to the capabilities of digital computers. Whereas the usual methods reduce problems to the solution of systems of linear equations, here the problems are reduced to the iteration of nonlinear transformations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606926

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A VUNERABILITY MODEL FOR WEAPON SITES WITH INTERDEPENDENT ELEMENTS,

Personal Author(s):

Firstman,Sidney I

Report Date:

18 Mar 1960

Media Count:

8 Page(s)

Report Number(s):

P-1384

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper describes a simple 'counting' model, employing overlays and probability-grids, which aids in the determination of the trade-off, measured in survival probability, between site dispersal and hardening for a weapon complex composed of several interdependent elements, separated by distances of less than two lethal radii. The survival-probability expressions are obtained through the use of Markov chains. An example of vulnerability estimation by the use of the model is included. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616584

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELECTRICAL POWER FROM ROCKETS,

Personal Author(s):

Huth,J H

Report Date:

16 Mar 1960

Media Count:

15 Page(s)

Report Number(s):

P-1944

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses the characteristics of magnetohydrodynamic generators, as applied to ground-based chemical-rocket exhausts. Simple open-cycle units can have ultimate efficiencies up to 40 per cent, and can provide electrical power on very short notice. More specifically, rocket-powered MHD generators are suited to applications requiring hundreds or thousands of electrical megawatts for a few minutes. Within this range one can foresee power densities (including the magnet) of at least 250 kw/cu

ft. The main problems center about developing suitable materials for operation near 2000 - 3000K. However, no moving parts are required in the MHD generator itself, where these temperatures manifest themselves. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616417

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REPORT ON SERVICE WITH THE AMERICAN EXHIBITION IN MOSCOW,

Personal Author(s):

THOMAS,John R

Report Date:

15 Mar 1960

Media Count:

107 Page(s)

Report Number(s):

P-1859

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616670

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TENTATIVE GENERALIZATION OF LEADING-EDGE VISCOUS INTERACTION PHENOMENA,

Personal Author(s):

Charwat,A F

Report Date:

15 Mar 1960

Media Count:

21 Page(s)

Report Number(s):

P-1994

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Abstract:

(U) The pressure induced by the interaction of a viscous boundary layer with an external hypersonic flow on sharp leading-edge surfaces is a function of three independent parameters. These represent the pressure-deflection sensitivity of the external flow field (interaction parameter), the length scale for the establishment of a boundary layer (rarefaction parameter), and the effect of heat transfer on its rate of growth (wall temperature ratio). An isobar map of the interaction problem in the domain of these independent variables is suggested and explored by using the existing data. This representation provides a framework within which to study further leading-edge interaction phenomena and also discloses contradictions and insufficiencies in the currently available data. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0612426

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME ANALYTICAL TECHNIQUES FOR PERSONNEL PLANNING,

Personal Author(s):

GORHAM,W

Report Date:

14 Mar 1960

Media Count:

18 Page(s)

Report Number(s):

P-1942

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical methods are presented for determining the relative contribution of Air Force personnel of different experience composition.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0613618

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) USE OF THE 'EXPECTED VALUE SOLUTION' IN LINEAR PROGRAMMING UNDER UNCERTAINTY,

Personal Author(s):

Madansky,Albert

Report Date:

11 Mar 1960

Media Count:

16 Page(s)

Report Number(s):

P-1939

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The use of two methods in the one-stage stochastic linear program is discussed: (1) replacing the random elements by their expected values (the 'expected-value solution'); and (2) replacing the random elements by pessimistic estimates of their values (the 'fat' technique). The one-stage problem and the

two-stage problem are described, and the relation between the 'fat' techniques used in the one-stage problem and the so-called 'slack' techniques useful in the two-stage problem is demonstrated.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616582

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLAR MAGNETIC, AURORAL, AND IONOSPHERIC PHENOMENA,

Personal Author(s):

Vestine,E H

Report Date:

10 Mar 1960

Media Count:

16 Page(s)

Report Number(s):

P-1940

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Studies of particles and fields in the upper atmosphere of interest in rocket and satellite investigations are described. Integral variants proposed by Longmire and Rosenbluth are applied to auroral particles assumed trapped in the geomagnetic field. These are successfully used, together with computations of the geomagnetic field above the earth, to calculate theoretical auroral isochasms and the northern and southern auroral zones. The lines of force defining the latter intersect the equatorial plane in a nearly circular oval 6.6 to 6.8 earth radii in radius. Possible causes of the aurora, magnetic disturbances, and the outer Van Allen radiation belt are discussed. A theory of auroral morphology based on the stability considerations of plasmas is briefly outlined. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616565

Full Text (pdf) Availability:

View Full Text (pdf)

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Size: 275 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD616565>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME MATHEMATICAL ASPECTS OF OPTIMAL PREDATION IN ECOLOGY AND BOVICULTURE

Descriptive Note:

Revised ed.

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Report Date:

08 Mar 1960

Media Count:

7 Page(s)

Report Number(s):

RAND-P-1911

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) General mathematical problems arising in the scientific study of predation have been studied from a variety of viewpoints. Primary emphasis has been given to the descriptive aspects of the prey and predator populations under various assumptions concerning interactions among the different members of the populations during these processes and to birth and death processes. The major objective of this note is to show how the functional equation technique of a new mathematical discipline, dynamic

programming, can be used in formulating and solving--both analytically and numerically--a variety of problems of optimal predation. We wish to determine optimal predation policies and are thus interested in the control, as opposed to the descriptive, aspects of predation processes.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616579

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIXTY YEARS OF GROWTH IN COMPUTING AND DATA PROCESSING CAPABILITY,

Personal Author(s):

PETRUSCHELL,R L

Report Date:

08 Mar 1960

Media Count:

5 Page(s)

Report Number(s):

P-1932

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A graph is presented that shows a 1:1,000,000 increase in the single-address speed of representative machines at particular points between 1900 and 1960, beginning with tabulating equipment and continuing to such electronic data processing machines as STRETCH and LARC. A second graph pictures the time-phased development of speed and storage capacity between 1951 and 1960, the single-address speed in thousands of operations per second being plotted against the directly addressable storage in thousands of characters; a character is defined as the total number of bits in the directly addressable storage divided by six. In most cases the addition of increments of speed and storage capacity did not take place simultaneously.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616581

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PEACEFUL ATOM IN RETROSPECT AND PROSPECT,

Personal Author(s):

Kramish,Arnold

Report Date:

08 Mar 1960

Media Count:

13 Page(s)

Report Number(s):

P-1938

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616577

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PERTURBATION AND RENORMALIZATION. I,

Personal Author(s):

Bellman,Richard

Richardson,John M

Report Date:

08 Mar 1960

Media Count:

11 Page(s)

Report Number(s):

P-1930

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The aim of the work is to present a new formalism for obtaining the perturbation solution of a nonlinear equation. The particular equations written will be used to illustrate the technique which is quite general. Although the method employed appears to be known in the literature of mathematical physics in particular cases, its scope does not appear to have been appreciated, nor does it seem to have been exploited in the mathematical domain. Attention was restricted to obtaining the first term of the perturbation expansion, reserving for a later date the questions of higher order terms, of application to more complex functional equations, of application to specific physical problems, to the derivation of asymptotic expansions, and finally, the problem of validating the technique. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616578

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WIRELINE DATA TRANSMISSION,

Personal Author(s):

LINDHOLM,Carroll R

Report Date:

07 Mar 1960

Media Count:

17 Page(s)

Report Number(s):

P-1931

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A general review of high speed data transmission over common carrier voice channel facilities is presented. Many of the problems arising due to the special nature of the medium are considered and result in recommendations for future data transmission systems. A few specific illustrative systems are discussed to indicate trends in system design. Relevant developments are also reported, as well as areas seemingly worthy of considerable further development. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616575

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MIMIC: A TRANSLATOR FOR ENGLISH CODING,

Personal Author(s):

Kelly,H S

Report Date:

07 Mar 1960

Media Count:

17 Page(s)

Report Number(s):

P-1926

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper describes an automatic coding system developed to provide rapid implementation, testing, and modification of computer routines for linguistic research. A Translator analyzes and translates English-like statements into a pseudo-code program. An Interpreter subsequently executes the program. The system is being used to program rules for insertion and inflection in a Russian-English translation routine. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616574

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET STRATEGIC IDEAS, JANUARY 1960,

Personal Author(s):

Dinerstein,H S

Report Date:

04 Mar 1960

Media Count:

32 Page(s)

Report Number(s):

P-1925

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An analysis is given of a speech made by Khrushchev to the Supreme Soviet on January 14, 1960, and of two speeches by Malinovskii, one made to the Supreme Soviet on the same date and one to a military group in Moscow on January 19. Quotations in the report are from the author's translations of the Soviet newspaper reports of these speeches.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616576

Corporate Author:
RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) LECTURE ON CIVIL DEFENSE.

Personal Author(s):
Mitchell,Harold H

Report Date:
02 Mar 1960

Media Count:
11 Page(s)

Report Number(s):
P-1927

Report Classification:
Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Civil Defense is discussed in terms of the following objectives: (1) alleviating the catastrophe of a nuclear attack on the United States; (2) reconstructing and reconstituting our nation to its pre-attack status; (3) the conducting of a peacetime foreign policy and the implementing of a broad deterrence strategy.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0616412

Corporate Author:
RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) AN INDEX OF SOVIET INDUSTRIAL OUTPUT.

Descriptive Note:
Revised ed.,

Personal Author(s):
KAPLAN,Norman M
Moorsteen,Richard H

Report Date:

02 Mar 1960

Media Count:

41 Page(s)

Report Number(s):

P-1848

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper we present (a) the results of a calculation of an index of Soviet industrial output and (b) some comments on, and applications of, these results. Underlying this paper are two studies: one on machinery prices and production and another, which incorporates the relevant results of the machinery study, on the output of all industrial products. This paper is a summary of the second of these studies and, as such, omits the detailed documentation and explanations which are available there or which, with respect to the machinery component, will be available when the machinery study is published. The results are presented here, shorn of important details, because the topic appears to be of some current interest. The results, however, are tentative for a variety of reasons; some of them are indicated below but others appear only in the underlying materials. In Section I we present the index of industrial output and briefly discuss its nature and limitations. Section II is a miscellany in which we: (a) compare our index with others; (b) discuss some dynamic aspects of Soviet industrial growth; (c) explore the indications of future rates of growth; (d) present an index of the output of final products; and (e) estimate changes in productivity. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0241043

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USE OF BAYESIAN TECHNIQUES FOR PREDICTING SPARE-PARTS DEMAND

Personal Author(s):

MCGLOTHLIN,W H

RADNER,R

Report Date:
01 Mar 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0237611
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) THE GAME MONOPOLOGS
Personal Author(s):
RENSHAW, JEAN REHKOP
HEUSTON, ANNETTE
Report Date:
Mar 1960
Media Count:
33 Page(s)
Report Number(s):
RM1917-1
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616571

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRACES, TERM RANKS, WIDTHS AND HEIGHTS,

Personal Author(s):

Fulkerson,D R

Ryser,H J

Report Date:

29 Feb 1960

Media Count:

18 Page(s)

Report Number(s):

P-1922

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This is an expository paper that discusses the notions of widths and heights of $(0, 1)$ -matrices (previously introduced by the authors), in the general setting of known results concerning traces and term ranks. Proofs are omitted throughout.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616563

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GLOSSARY LOOKUP MADE EASY,

Personal Author(s):

Kelly,H S

Ziehe,T W

Report Date:

29 Feb 1960

Media Count:

16 Page(s)

Report Number(s):

P-1909

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Most of the work on the dictionary problem for machine translation has consisted of attempts to reduce the amount of information involved, thus bringing the problem within the capabilities of presently available or soon-to-be-available computing equipment. This paper presents a technique for handling the problem with currently available computing equipment and without the complexities of information compression. In essence, the approach is to compile a glossary of forms from the current text and then to retrieve information about each from the dictionary as the information is needed in the translation process. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616580

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON 'THE EFFECT OF MICROMETEORITES ON REFLECTING SURFACES',

Personal Author(s):

BJORK,R L

Report Date:

29 Feb 1960

Media Count:

11 Page(s)

Report Number(s):

P-1936

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A summary and critique is given of a paper by R. E. Henderson and P. Stanley, entitled 'The effect of micrometeorites on reflecting surfaces,' which was presented at the 1960 meeting of the Institute of Environmental Science and published in the proceedings of that meeting.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606938

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE K-TH BEST POLICIES,

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Report Date:

26 Feb 1960

Media Count:

1 Page(s)

Report Number(s):

P-1417

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown how the functional equation technique of dynamic programming can be used to determine the optimal, second best, third best, etc., policies for various deterministic and stochastic multistage decision processes. This is of importance in various problems in combinatorial analysis, network and switching theory, feedback control, and sensitivity analysis. A routing problem is discussed in some detail. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616573

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE POTENTIAL OF ELECTRONIC DATA PROCESSING IN MUNICIPAL GOVERNMENT,

Personal Author(s):

HEARLE,E F R

Report Date:

26 Feb 1960

Media Count:

9 Page(s)

Report Number(s):

P-1924-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The major characteristics of electronic data processing equipment and the use of computers in solving municipal problems are explored. The fundamental functions performed by electronic data processing (EDP) equipment are discussed. These functions are: Input, to get information into the system; Processing, to manipulate the data according to specified rules; Storage, to file data, either temporarily or on a permanent basis; and Output, to present the results of the processing or the status of any data stored in the system.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616568

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOVIET SCIENTIFIC AND TECHNICAL LITERATURE: SOURCES AND AVAILABILITY,
Personal Author(s):
Neiswender,Rosemary
Report Date:
23 Feb 1960
Media Count:
19 Page(s)
Report Number(s):
P-1919
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0616569
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A COMPARISON OF HYDRODYNAMIC AND ELECTROSTATIC FORCES ON CLOUD DROPLETS,
Personal Author(s):
Sartor,J D
Davis,M H
Report Date:
23 Feb 1960
Media Count:
11 Page(s)
Report Number(s):
P-1920
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The hydrodynamic and electrostatic forces on cloud droplets have been computed. 'Exact' solutions to the two body problems of hydrodynamics and electrostatics are used to give the forces between cloud droplets of arbitrary size falling freely in an arbitrary uniform electrostatic field. The RAND Corporation's Johnniac and IBM-704 were used for the numerical calculations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616657

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GOVERNORS OF THE CONJUNCTION YTO,

Personal Author(s):

PUSTULA,J H

Report Date:

22 Feb 1960

Media Count:

16 Page(s)

Report Number(s):

P-1978

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Russian subordinate conjunction YTO = that introduces noun clauses. This paper lists all of the words and idioms that have been found to govern YTO clauses in the RAND corpora of Russian physics text. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224166

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE DECISION-MAKING PROBLEM IN DEVELOPMENT.

Personal Author(s):

Klein, Burton H

Report Date:

19 Feb 1960

Media Count:

31 Page(s)

Report Number(s):

P1916

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616570

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE VERTICAL MOTION OF SOLID SPHERES IN THE ATMOSPHERE,

Personal Author(s):

Rapp, R R

Report Date:

18 Feb 1960

Media Count:

23 Page(s)

Report Number(s):

P-1921

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An equation of motion is determined for spherical objects falling through the atmosphere. A method for computing terminal velocities over a wide range of elevation and particle size is then developed. The manner in which a class of spheres, which satisfy a density size relationship, approach terminal velocity from rest is investigated. Finally the effect of oscillatory motions on very small spheres is discussed.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616566

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/616566.pdf

Size: 898 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD616566>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ALLOCATION OF TWO TYPES OF AIRCRAFT IN TACTICAL AIR WAR: A GAME-THEORETIC ANALYSIS

Personal Author(s):

Berkovitz, L D

Report Date:

18 Feb 1960

Media Count:

27 Page(s)

Report Number(s):

RAND-P-1914

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The problem of allocating two types of aircraft (bombers and fighters) among three different air tasks (counter air, air defense, and support of ground operations) in a multi strike campaign is analyzed as a two sided war game. It is assumed that a bomber can be used in either the counter air or ground support operations, while a fighter can be used in either the air defense or ground support roles. That is, bombers and fighters have one task-ground support-in common. Optimal employment during the last strikes of the campaign consists of a concentration of all resources on support of ground operations. Optimal employment during the early strikes of the campaign requires randomization by both sides.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0237788

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DERIVATION OF TWO SIMPLE METHODS FOR THE COMPUTING OF RADIOACTIVE FALLOUT

Descriptive Note:

Research memo.,

Personal Author(s):

BATTEN, E S

IGLEHART, D L

RAPP, R R

Report Date:

18 Feb 1960

Media Count:

49 Page(s)

Report Number(s):

RM-2460

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0256812

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THERMOELECTRIC POWERPLANTS UTILIZING CONTAINED NUCLEAR EXPLOSIONS

Personal Author(s):

HOFFMAN,G A

Report Date:

18 Feb 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This study is an early attempt at defining the problem of stationary thermoelectric powerplants that would utilize the thermal energy released by detonating nuclear devices in a closed cavity, surrounded by a heat exchanger. The system may require a capital investment of 2 billion dollars but might produce electric power at a cost competitive with that of conventionally produced power. The results of this study suggest that none of the obstacles is insurmountable. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224312

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/224312.pdf

Size: 676 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD224312>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NUMERICAL CALCULATIONS OF BLAST WAVES

Personal Author(s):

Brode, Harold L

Report Date:

16 Feb 1960

Media Count:

21 Page(s)

Report Number(s):

RAND-P-1933

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The general steps in proceeding from physical assumptions to numerical answers are outlined for solutions by a Lagrangean coordinate, artificial viscosity method.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616564

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GROUPING AND DEPENDENCY THEORIES,

Personal Author(s):

Hays, David G

Report Date:

16 Feb 1960

Media Count:

13 Page(s)

Report Number(s):

P-1910

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Immediate-constituent analysis and dependency analysis (two theories of syntactic description) are based, respectively, on the topologies of grouping and of trees. A correspondence between structures of the two types is defined, and the two topologies are compared, mainly in terms of their empirical applications. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0315618

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Diffusion of Nuclear Weapons to Additional Countries: The 'Nth Country' Problem,

Personal Author(s):

Ikle, F C

Speier, H

Report Date:

15 Feb 1960
Media Count:
92 Page(s)
Report Number(s):
RM-2484-RC
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; Distribution unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0464181
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/464181.pdf
Size: 564 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD464181>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) A CONSERVATIVE ESTIMATE OF THE METEOROID PENETRATING FLUX
Personal Author(s):
Bjork, R L
Report Date:
11 Feb 1960
Media Count:
15 Page(s)
Report Number(s):
RAND-P-1913
XD-DOD
Monitor Series:
DOD
Report Classification:
Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) In early December, 1959, the Aircraft Reactors Branch of the Atomic Energy Commission held a symposium for the purpose of assessing the meteoroid hazard to space power stations being designed under the SNAP program. The stations generally contain a nuclear reactor which powers an electrical generator. Operating the reactor in space requires the use of a large area radiator whose weight is influenced drastically by the criterion that it must survive the meteoroid hazard. For the larger reactors the skin thickness required for structural strength is very small compared with that required to shield the radiator's interior against meteoroid penetration. Since the radiator weight comprises an important portion of the total system weight, it is essential to minimize it, which requires an accurate knowledge of the meteoroid hazard itself. It is felt that structures designed according to the laws set forth herein will be very reliable, and that future measurements and research will enable the weights of the structures to be decreased, rather than to force an increase in them. The problem is divided into two parts: (1) estimating the flux of meteoroids as a function of velocity, mass, and density; and (2) estimating the effect of a meteoroid of given velocity, mass and density.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616557

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STRATEGIC GAMING,

Personal Author(s):

Helmer,Olaf

Report Date:

10 Feb 1960

Media Count:

19 Page(s)

Report Number(s):

P-1902

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper uses a number of exhibits relating to a strategic procurement game in order to illustrate various concepts and techniques of operational gaming. In particular, the relative merits of play by human players versus machine play are discussed, as are those of rigid rules versus umpire rulings. The roles of the experts in different aspects of gaming are examined and illustrated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616562

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE NOISE TEMPERATURE OF COUPLING NETWORKS,

Personal Author(s):

Bedrosian,E

Report Date:

10 Feb 1960

Media Count:

3 Page(s)

Report Number(s):

P-1907

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The relationship $T = S/L + N(1-1/L)$ is derived where S is the noise temperature of the source, N is the temperature of the coupling network, T is the noise temperature at the output (under matched conditions), and L is the coupling-network power loss ratio, for a passive coupling network which is used to connect a source to a receiver.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0237155

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE FLIGHT OPERATIONS PLANNER

Personal Author(s):

JONES, W M

SHAPIRO, M B

Report Date:

09 Feb 1960

Media Count:

27 Page(s)

Report Number(s):

RM-2525

Contract Number:

AF 49(638)700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616559

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE FOUNDATIONS OF A THEORY OF STOCHASTIC VARIATIONAL PROCESSES,

Personal Author(s):
Bellman, Richard
Report Date:
09 Feb 1960
Media Count:
26 Page(s)
Report Number(s):
P-1903
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0616560
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) DIFFERENCES BETWEEN THE PERSONAL DEMAND FOR MONEY AND THE BUSINESS DEMAND FOR MONEY,

Personal Author(s):
McCall, John J
Report Date:
08 Feb 1960
Media Count:
36 Page(s)
Report Number(s):
P-1905
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:
(U) The theoretical framework concerning the differences between the personal and the business demand for money is developed. Four standard hypotheses are introduced and the theory is restated in terms of demand deposits and debits to demand deposits. Some of the implications of the economic

theory are mentioned, and a problem of data collection is discussed. Estimates of business turnover and personal turnover are obtained for banks in the Seventh Federal Reserve District where business turnover was found to be significantly greater than personal turnover. An analysis of data which the Federal Reserve Bank of Chicago collected from a bank in Kankakee, Illinois is presented. The main conclusions of the analysis are (1) that the synchronization of debits and credits in the business sector is superior to synchronization in the personal sector; (2) that the person is more uncertain about his average transactions over a period of time than is the business firm; (3) that because of (1) and (2) business turnover is greater than personal turnover; and (4) that while personal debits and personal deposits are unrelated, there is a significant positive relation between business debits and business deposits, i.e., business turnover is more stable than personal turnover.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0260195

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STRATEGY AND ORGANIZATION IN A SYSTEM DEVELOPMENT PROJECT

Personal Author(s):

MARSCHAK,THOMAS A

Report Date:

03 Feb 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A system is described as a complex aggregation of components, based on established principles. The study is concerned with what is efficient system development and is it observed in American industry. The intensive historical study of completed system development projects is investigated. The system considered as an example is a microwave relay system for the transmission over long distances, via a chain of relay towers, of telephone conversations and television signals. Its development was complete and its manufacture had begun in 1958. The start of its development as a system can reasonably be

dated 1952. The project built up to a peak of about ninety technical persons, and its manpower and other direct costs are roughly estimated at \$15,000,000. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616558

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LINGUISTIC RESEARCH AT THE RAND CORPORATION,

Personal Author(s):

HAYS,David G

Report Date:

02 Feb 1960

Media Count:

22 Page(s)

Report Number(s):

P-1900

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper describes postediting rules for description of function in context, work on computational routines for semi-automatic analysis, the concept of idiom-instructure, and two broad problems on which work is just beginning at RAND: grammatic transformation and distributional semantics. The latter problems are especially important for automatic indexing, abstracting, and text searching. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616513

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE STABILITY OF SOLUTIONS OF THE LINEARIZED PLASMA EQUATION,

Personal Author(s):

Bellman, Richard

Richardson, John M

Report Date:

02 Feb 1960

Media Count:

8 Page(s)

Report Number(s):

P-1898

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616514

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SEPARATION OF URANIUM ISOTOPES BY GASEOUS DIFFUSION: A LINEAR PROGRAMMING MODEL,

Personal Author(s):

Fort, D M

Report Date:

02 Feb 1960

Media Count:

15 Page(s)

Report Number(s):

P-1899

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The model depicted concerns an idealized version of the gaseous diffusion process in steady-state operation. Three types of relations are taken into account: (a) material balance within the plant, (b) the scale of plant required to generate given material flows, and (c) the irreversible nature of the gaseous diffusion process. The principal intended contribution of this paper is in suggesting the importance of the last consideration in certain applications, and in describing a way to handle it via linear programming. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616511

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNIST CHINA AND NUCLEAR WARFARE,

Personal Author(s):

Hsieh,Alice Langley

Report Date:

01 Feb 1960

Media Count:

21 Page(s)

Report Number(s):

P-1894

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Chinese Communists, on coming to power, were confronted with a set of strategic problems totally new to them. No longer a mobile force operating from the countryside, they were after 1949 in control of cities, and were rapidly developing a vested interest in industrial complexes, communication

centers, and transportation facilities. Although the Korean War awakened them to the importance of modernized, regular forces, the problem of decision-making in the field of military affairs was exacerbated and complicated by the revolution in weaponry and strategic thinking that had occurred outside China in the very period during which the Chinese Communists were gaining and consolidating their power. The report explores the nature of the Chinese response to this revolution in weaponry and strategic thinking; the divisive effect that a growing appreciation of the implications of nuclear warfare had on Chinese military circles and on relations between the Party and the Army; and the significance of the evolving Chinese attitudes for the Sino-Soviet strategic relationship.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0316692

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ENDURANCE CAPABILITIES OF CURRENT STATE-OF-THE-ART AIRPLANES WITH AND WITHOUT
BOUNDARY-LAYER CONTROL

Personal Author(s):

SKAVDAHL, HOWARD

Report Date:

Feb 1960

Media Count:

75 Page(s)

Report Number(s):

RM-2459

Contract Number:

AF49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616510

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE OPTIMUM DETECTION OF ANALOG-TYPE DIGITAL DATA,

Personal Author(s):

Bedrosian,Edward

Report Date:

28 Jan 1960

Media Count:

7 Page(s)

Report Number(s):

P-1893

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0419902

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON STYLE IN RESEARCH AND DEVELOPMENT,

Personal Author(s):

Katz, Amron H

Report Date:

26 Jan 1960

Media Count:

11 Page(s)

Report Number(s):

P2030

Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
ADA286688
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/a286688.pdf
Size: 11 MB
Handle / proxy Url: <http://handle.dtic.mil/100.2/ADA286688>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) Space Handbook: Astronautics and Its Applications, Staff Report of the Select Committee on
Astronautics and Space Exploration
Descriptive Note:
Staff rept.
Personal Author(s):
Buchheim, Robert W
Bjork, R L
Cohen, S T
Crain, C M
Davis, M H
Dole, S H
Edwards, T I
Frick, R H
Gabler, R T
Garber, T B
Report Date:
26 Jan 1960
Media Count:
250 Page(s)
Report Number(s):
XJ-US/CONGRESS

Monitor Series:

US/CONGRESS

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Astronautics and its applications, Technology in the space environment, Rocket vehicles, propulsion systems, propellants, internal power sources, structures and materials, flight path and orientation control, guidance, communication, observation and tracking, atmospheric flight...

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0632401

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/632401.pdf

Size: 520 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD632401>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE ROLE OF THE ELECTROSTATIC FIELD IN THE COAGULATION OF FOG AND CLOUD DROPLETS

Personal Author(s):

Sartor, J D

Report Date:

25 Jan 1960

Media Count:

14 Page(s)

Report Number(s):

P-2134

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The electrostatic field of the atmosphere is normally enhanced in fog and cloud. This field, even when quite small, can effect the combination of colliding but otherwise noncoalescing droplets. Stronger fields produce forces of mutual attraction among the droplets. Preliminary results on the degree to which electrostatic forces act to modify the motion of cloud droplets are presented. Methods for the possible modification of the field are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616507

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EMPIRICAL RELATIONSHIPS FOR JET-FLAP LIFT AND DRAG PREDICTION,

Personal Author(s):

Blakeslee,D J

Report Date:

21 Jan 1960

Media Count:

15 Page(s)

Report Number(s):

P-1889

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Empirical relations for the prediction of the lift and drag of unswept three-dimensional jet-flapped wings are shown, along with the necessary inputs. Plotted data show that the equations organize lift and drag data with a consistency sufficient for preliminary design use. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0663391

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUTURE SCIENCE AND TECHNOLOGY OF THE U.S.S.R.

Descriptive Note:

Revised ed.,

Personal Author(s):

Krieger, F J

Report Date:

21 Jan 1960

Media Count:

28 Page(s)

Report Number(s):

P-1647

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Chief among the factors that have contributed to the rise of the Soviet Union from a backward nation to a dominant world power are the technical efficiency of its leadership, its capacity for industrial progress, the genius and organization of its scientific community, and its ability to capitalize on Western developments. The status of Soviet science in various fields of science and technology is reviewed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616508

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ATMOSPHERIC ENTRY OF MANNED VEHICLES,

Personal Author(s):

Gazley,Carl ,Jr

Report Date:

20 Jan 1960

Media Count:

41 Page(s)

Report Number(s):

P-1890

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: Microfilm only.

Abstract:

(U) The establishment of manned space stations requires the development of a reliable system for manned return to the Earth. The requirements of such a system are reviewed and compared with the characteristics of various atmospheric penetration techniques. While human deceleration limitations require the relatively low decelerations of gradual atmospheric entry (i.e., shallow path), the aerodynamic shaping of the vehicle and the method of surface heat absorption (or rejection) can conceivably cover a wide range of feasible possibilities. This paper discusses problems of orbital departure and the establishment of the initial entry path, the dynamics of deceleration during entry, the aerodynamic heating of the vehicle surface, and the characteristics of various types of surface-protection systems. It is concluded that there are two types of feasible vehicles for manned entry: (1) a blunt dense vehicle with little or no aerodynamic lift and a low-temperature ablation-cooling system; and (2) a radiation-cooled vehicle using a very light drag brake or lifting surface to achieve highaltitude deceleration.(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616506

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DECISION-MAKING IN THE SCHOOLS: AN OUTSIDER'S VIEW,

Personal Author(s):

Kershaw,Joseph A

McKean,Roland N

Report Date:

19 Jan 1960

Media Count:

15 Page(s)

Report Number(s):

P-1886-FF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) One method of approaching decision making is discussed. A numerical example is given which illustrates this approach to decision-making and also shows how more nearly scientific comparisons of school policies can perhaps be made.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616501

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UPPER ATMOSPHERE STUDIES,
Personal Author(s):
Kellogg, William W
Report Date:
16 Jan 1960
Media Count:
13 Page(s)
Report Number(s):
P-1876
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0616428
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THEORY AND POLICY IN THE FRENCH NATIONALIZED INDUSTRIES,
Personal Author(s):
Marschak, Thomas A
Report Date:
15 Jan 1960
Media Count:
44 Page(s)
Report Number(s):
P1871
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:

(U) Welfare economics has produced no theorems prescribing Pareto-optimal behavior for public monopolies operating under all the constraints which face the French nationalized industries and departing in their many ways from the smooth, certain world of existing theory. The closest that

theorists have come is to obtain rules for some of the important decisions under one of the major current constraints (balanced budgets) when the rest of the economy is perfectly competitive; to approximate even these rules requires calculations infeasible at present. But pricing, investment, and other decisions must be made here and now. The ideal solutions of welfare economics, appropriately touched up to meet the constraints, and approximated to the extent that analytical resources allow, have provided, in the French experience, usable investment and pricing procedures; in at least one major case (the Tarif Vert) there can be little dispute that the result has been an improvement over previous practice. There is hoped that similar improvement in pricing will occur in time in the other industries. With respect of investment choices, there is massive agreement that present-value rankings made for several interesting discount rates are better than any alternative practical procedures; the rankings certainly compare favorably with analyses actually used in the past for investment choices in government water resource development in the US. Had there been a great deal of worrying over the shortcomings of the ideal solutions compared to more realistic secondbest solutions, or over the distributive effects of policy changes, these pricing and investment procedures might never have been developed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0234653

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE ROLE OF THEORY IN THE STUDY OF CONFLICT

Personal Author(s):

SCHELLING, T C

Report Date:

13 Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0610836

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MODEL FOR EVALUATING FLEETS OF TRANSPORT AIRCRAFT,

Personal Author(s):

Summerfield,John R

Report Date:

12 Jan 1960

Media Count:

18 Page(s)

Report Number(s):

P-1882

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A Monte Carlo model is described which can be used in evaluating the capability of both actual and possible transport systems to meet the airlift demands of the U. S. military establishment. The model includes peacetime flying activities, wartime deployments, and the transition from peace to war. Transports fly through a simulated route structure according to rules determined by aircraft and load characteristics and by random elements of wind, temperature, and aircraft maintenance. A fleet's performance is judged by its cumulative delivery, over time, of materiel and personnel to a specified combat zone. The model thus helps in making comparisons among different transport fleets. It can also be used to detect bottlenecks in a particular transport system. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616374

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE UPPER ATMOSPHERE AS OBSERVED WITH ROCKETS AND SATELLITES.

Descriptive Note:

Revised ed.,

Personal Author(s):

Kellogg, William W

Report Date:

11 Jan 1960

Media Count:

11 Page(s)

Report Number(s):

P-1813

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) With emphasis on recent observations with rockets and satellites, the advances in understanding of the upper atmosphere which have occurred during and since the I.G.Y. are briefly reviewed. The global coverage of these upper atmosphere observations revealed important latitudinal and seasonal changes in densities, pressures, and winds. The composition of the upper atmosphere, and its electrical properties were observed, and the influxes of energetic particles and radiations from the sun and the radiation belts were studied from above the atmosphere. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616429

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TAXATION AND THE DEMAND FOR ALCOHOLIC BEVERAGES,

Personal Author(s):

Niskanen,W A

Report Date:

11 Jan 1960

Media Count:

17 Page(s)

Report Number(s):

P-1872

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper presents a study of the characteristics of aggregate consumer demand for alcoholic beverages and the influence of changes in the alcoholic beverage taxes on this aggregate demand. Estimates of these effects shed some light on the normative question of the effectiveness of these taxes as instruments of public policy. Part I presents an econometric model of the markets for distilled spirits, beer, and wine. Part II suggests and tests three hypotheses to explain the changes in the actual tax rates since 1934.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224063

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND THE CALCULUS OF VARIATIONS,

Personal Author(s):

Dreyfus,Stuart E

Report Date:

08 Jan 1960

Media Count:

18 Page(s)

Report Number(s):

P1464

Report Classification:

Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0616499
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) DESIGN AND OPERATION OF GROUND GUIDANCE SYSTEMS,
Personal Author(s):
Lewis,Donald E
Report Date:
07 Jan 1960
Media Count:
49 Page(s)
Report Number(s):
P-1874
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0616430
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE TERMS OF SOVIET-SATELLITE TRADE: A BROADENED ANALYSIS,
Personal Author(s):

Mendershausen,Horst

Report Date:

07 Jan 1960

Media Count:

52 Page(s)

Report Number(s):

P-1873

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

22 - DOCUMENT ILLEGIBLE

Abstract:

(U) The study led to the following findings about Soviet export prices: (1) Individual Satellite countries experienced different average degrees of price discrimination on Soviet exports. The discrimination effect tended to be stronger for the Balkan countries than for Poland, Czechoslovakia and East Germany. Poland was the only Satellite that enjoyed a continual decline in the degree of Soviet export price discrimination over the period as a whole. (2) In comparison to West Germany, East Germany's terms on Soviet exports were, on the average, consistently unfavorable during the period. (3) Finland and Egypt, two non-Bloc countries with especially close trade ties to the Soviet Union, tended to pay more for Soviet exports than did Free Europe as a whole, but less than the Satellites. (4) Soviet export prices to the Satellites showed sizable year-to-year fluctuations, for individual commodities. But the uneven timing of these fluctuations from commodity to commodity, which was caused by the noted lag effects, tended to smooth out the movements of a general index of Soviet export prices to the Satellites, relative to an index of such prices to Free Europe.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616427

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ASYMPTOTIC BEHAVIOR OF SOLUTIONS OF LINEAR PARABOLIC EQUATIONS,

Personal Author(s):

Bellman,Richard

cooke,Kenneth L

Report Date:

06 Jan 1960

Media Count:

6 Page(s)

Report Number(s):

P-1870

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616502

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE VALUE OF OVERSEAS BASES,

Personal Author(s):

Wohlstetter,Albert

Report Date:

05 Jan 1960

Media Count:

17 Page(s)

Report Number(s):

P-1877

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Overseas bases are of great importance, but not all arguments to support their importance are right. Among those that are wrong is the notion that in the face of a well coordinated enemy missile attack, missiles placed overseas without protection are sure either to retaliate and disrupt the opening enemy salvo or to provide extra warning for the continental U.S. They can guarantee neither one. But deterring a well coordinated thermonuclear attack on the U.S., while vital, is by no means all we want to do. We

must have insurance that we can limit damage in case deterrence fails whether by accident or deliberation. And overseas bases can help disrupt the poorly coordinated attacks that are now likely in the event that the war starts by accident (and this, in turn, if we have a good high confidence deterrent, is more likely to be the way a war starts if it starts at all). Finally, the overseas bases play a principal role in limited wars. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616421

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SURVEY OF THE GEOMAGNETIC FIELD IN SPACE,

Personal Author(s):

Vestine,E H

Report Date:

05 Jan 1960

Media Count:

35 Page(s)

Report Number(s):

P-1863-NSF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616509

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HOW GOOD IS THE LUNIK III MOON PHOTOGRAPHY,

Personal Author(s):

Davies,Merton E

Report Date:

04 Jan 1960

Media Count:

10 Page(s)

Report Number(s):

P-1892

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In a previous paper, 'Lunar Exploration by Photography from a Space Vehicle,' the author discussed a photographic system for obtaining high-quality pictures of the moon. Included was a comparison of the surface detail yielded by astronomical lunar photography with that afforded by conventional aerial photography. It is the purpose of the present paper to compare the quality of the released Soviet pictures of the back side of the moon with that of conventional, earth-originated photographs of the front side. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616425

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HOW MUCH AUTOMATICITY FOR CHECKOUT EQUIPMENT,

Personal Author(s):

Firstman,Sidney I

Report Date:

04 Jan 1960

Media Count:

25 Page(s)
Report Number(s):
P-1867
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0419745
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) ECONOMIC PLANNING AND THE MILITARY ELECTRONICS INDUSTRY,
Personal Author(s):
Pardee, F S
Report Date:
Jan 1960
Media Count:
22 Page(s)
Report Number(s):
P2006
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0237089
Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ADDITIONAL VALUES FOR THE EQUILIBRIUM COMPOSITION AND THERMODYNAMIC PROPERTIES OF AIR

Personal Author(s):

GILMORE, F R

Report Date:

30 Dec 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616426

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LOGISTICS RESEARCH AND MANAGEMENT SCIENCE,

Personal Author(s):

Geisler,Murray A

Report Date:

29 Dec 1959

Media Count:

20 Page(s)

Report Number(s):

P-1868

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The United States Air Force provides a tremendously complex and challenging setting for management science. Many useful contributions have been made to the management of the logistics

system through the application of research techniques. However, in many ways the surface has been barely scratched. One lesson, above all, persists from this experience -- the effort must be consistent and undeterred. It is very difficult to change an organization as large as the Air Force very rapidly, and it is even more important that the changes be in the right direction. Caution on the part of the scientist and the customer is therefore a desirable strategy. At the same time, the demands on the Air Force managers are becoming more challenging and difficult. Their need for assistance from management science is growing proportionately. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616424

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AUTOMATIC LANGUAGE-DATA PROCESSING IN SOCIOLOGY,

Personal Author(s):

Hays,David G

Report Date:

29 Dec 1959

Media Count:

33 Page(s)

Report Number(s):

P-1866

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The use of computers in analysis of mass communications, interaction transcripts, and other sociological data couched in natural language is possible. A method of grammatic analysis is described, and techniques for automatic content analysis and interaction process analysis are sketched. The need for research on the relations between linguistic and social variables is emphasized. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616398

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON ONE-DIMENSIONAL INVISCID MAGNETOHYDRODYNAMIC FLOW.

Descriptive Note:

Revised ed.,

Personal Author(s):

Cole,J D

Huth,J H

Report Date:

28 Dec 1959

Media Count:

19 Page(s)

Report Number(s):

P-1827

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The one-dimensional steady flow of a compressible inviscid conducting gas through a transverse magnetic field is characterized by a single non-dimensional plot, independent of conductivity. The coordinates are the magnetic field strength and the fluid flow velocity; parameters which characterize events are the entrance Mach number, constant electric field, and the ratio of magnetic energy density to initial flow kinetic-energy density (the magnetic pressure number). (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0224306
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) INDUCTIVE PROOF OF THE SIMPLEX METHOD.
Personal Author(s):
Dantzig, George B
Report Date:
28 Dec 1959
Media Count:
7 Page(s)
Report Number(s):
P-1851
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0616419
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SPACE VEHICLE POWER PLANTS,
Personal Author(s):
HUTH,J H
Report Date:
22 Dec 1959
Media Count:
75 Page(s)
Report Number(s):
P-1861
Report Classification:
Unclassified
Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

22 - DOCUMENT ILLEGIBLE

Abstract:

(U) A review is given of the possibility of using chemical units, solar-powered units, nuclear power systems, and special devices as power sources in space vehicles. Special attention is given to the effects of the space environment on power systems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616418

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAXIMUM TOTAL ENERGY OF THE VAN ALLEN RADIATION BELT,

Personal Author(s):

Dessler,A J

Vestine,E H

Report Date:

17 Dec 1959

Media Count:

7 Page(s)

Report Number(s):

P-1860

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that the results of the spherical harmonic analysis of the geomagnetic field place an upper limit on the energy stored in the Van Allen radiation belt.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616411

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) QUASI-CONCAVE PROGRAMMING,

Personal Author(s):

Arrow,Kenneth J

Enthoven,Alain C

Report Date:

16 Dec 1959

Media Count:

39 Page(s)

Report Number(s):

P-1847

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0608877

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EVALUATION OF THE HUMAN RETINAL BURN PROBLEM ARISING FROM ATOMIC DETONATIONS,

Personal Author(s):

ELSWICK,W R

Mitchell,H H

Report Date:

15 Dec 1959

Media Count:

49 Page(s)

Report Number(s):

RM-2500

Contract Number:

AF49638700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The general problem of retinal burns resulting from nuclear detonations within the atmosphere was investigated. The work in the field was reviewed and employed in this study in order to allow quantitative assessment of the danger of eye burn in any particular situation. Burns will occur when the radiant intensity reaches a value of around 0.6 to 2.0 cal/sq cm on the retina. Maximum distances for threshold burn based on 2 cal/sq cm from low altitude bursts can extend for as much as 25 miles (daytime) to 75 miles (nighttime) depending upon the visibility and the yield of the weapon. The problem is minimized for most situations because the fireball will not be in the field of vision for most people. For those for whom it is in the field of vision, the size of the image and its location on the retina, are important in determining actual damage to sight. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224163

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Link between Science and Invention: The CASE of the Transistor,

Report Date:

15 Dec 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616423

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE FUTURE OF OPERATIONS RESEARCH IN THE AIRCRAFT AND SPACE SYSTEMS INDUSTRIES,

Personal Author(s):

Davis,R A

Schamberg,R

Report Date:

14 Dec 1959

Media Count:

12 Page(s)

Report Number(s):

P-1865

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The ever expanding scope of Operations Research Activity in the Aircraft, Missile and Spaceflight fields is traced, beginning with the search for optimal employment of existing military aircraft in World War II. The most promising area for future application of operations research is believed to be the search for preferred operational concepts in an era when an advanced technology renders feasible a greater variety of expensive systems than can generally be developed and procured with available budgets. From a point of view, approximating that of a military customer, it is indicated that the effectiveness of operations analysis performed by the aircraft and missile industry can be improved considerably through early collaboration between advanced design and operations research groups, with the aim of creating a preferred, balanced system rather than devising optimal tactics for the employment of a specific vehicle configuration. The paper concludes with a discussion of several problem areas which deserve concentrated operations research effort by the space industry. These problem areas arise primarily from the following characteristics of many space systems: desired long system life, desired high system reliability, relatively small number of vehicles required. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616414

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IS DETERRENCE ENOUGH OR SHOULD WE BE PREPARED TO FIGHT A GENERAL WAR IN THE 1960'S,

Personal Author(s):

Barlow,E J

Report Date:

11 Dec 1959

Media Count:

20 Page(s)

Report Number(s):

P-1850

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616410

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE SEPARATION OF EXPONENTIALS,

Personal Author(s):

Bellman,Richard

Report Date:

11 Dec 1959

Media Count:

4 Page(s)

Report Number(s):

P-1846

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616415

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMUM SEARCH ROUTINES FOR AUTOMATIC FAULT LOCATION,

Personal Author(s):

FIRSTMAN,Sidney I

Gluss,Brian

Report Date:

11 Dec 1959

Media Count:

20 Page(s)

Report Number(s):

P-1857

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616413

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME MILITARY APPLICATIONS OF THE THEORY OF GAMES,

Personal Author(s):

Dresher,Melvin

Report Date:

10 Dec 1959

Media Count:

16 Page(s)

Report Number(s):

P-1849

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Many military problems are concerned with the allocation of forces in space and/or time in a competitive environment. We shall give some examples of the application of the theory of games to such problems. The examples are from three general military fields: strategic air war, tactical air war, and target prediction. An important problem in strategic air war is the target selection problem - the choice of targets for attack and defense. This problem is formulated both as a finite game and an infinite game. In each case the optimal allocations are described. In the tactical air war example we view the tactical air war game as consisting of a series of strikes, or moves, each of which consists of simultaneous counterair, air defense, and close support operations by each side to accomplish a given theater mission. We give some general properties of the optimal allocations. Finally, the problem of scheduling the launching of missiles is described as an example of target prediction. The optimal launching schedules are described for both sides. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616420

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RESOLVABILITY OF POINT SOURCES,

Personal Author(s):

Swerling, Peter

Report Date:

08 Dec 1959

Media Count:

27 Page(s)

Report Number(s):

P-1862

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem investigated is the resolvability, in the presence of noise, of point sources which are separated in azimuth by less than the width of the main lobe of the gain pattern. The probability of correctly resolving two sources is derived for a particular class of decision methods as a function of the strengths of the sources, their angular separation and noise level. Numerical results are presented for a case which corresponds more accurately to optical or infrared devices than to radar. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616503

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAIN STREET, THE MOON, AND WHAT NEXT,

Personal Author(s):

Lynn, H P, Jr

Report Date:

07 Dec 1959

Media Count:

25 Page(s)

Report Number(s):

P-1878

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion is presented of the following questions: How do we stand technically in our space programs. Why are we involved in space programs, anyway.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

AD0616409

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE UPPER ATMOSPHERE AND GEOMAGNETISM,

Personal Author(s):

Vestine,E H

Report Date:

03 Dec 1959

Media Count:

68 Page(s)

Report Number(s):

P-1845

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616422

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ASCENT GUIDANCE FOR A SATELLITE RENDEZVOUS,

Personal Author(s):

GARBER,T B

Report Date:

01 Dec 1959

Media Count:

25 Page(s)

Report Number(s):

P-1864

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Microfilm only after original copies exhausted.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604543

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONTROL AND SUPPORT SYSTEMS: THEIR DESIGN AND DEVELOPMENTS,

Personal Author(s):

ZWICK,C J

Report Date:

30 Nov 1959

Media Count:

13 Page(s)

Report Number(s):

B-146-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The discussion covers two subjects. It comments on some of the problems the Air Force is currently encountering in designing control systems. Secondly, it outlines an approach to control-system development that has been taken in the simulation laboratory.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616408

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL EQUATIONS IN THE THEORY OF DYNAMIC PROGRAMMING. XI: LIMIT THEOREMS,

Personal Author(s):

Bellman, Richard

Report Date:

30 Nov 1959

Media Count:

7 Page(s)

Report Number(s):

P-1843

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A limit theorem is presented which is valid for a general class of Markovian decision processes. The result is of interest because of the simple conditions which are imposed and the argument used.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604542

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONTROL AND SUPPORT SYSTEMS: BASIC RESEARCH FOR THE MAN-MACHINE COMMUNICATION BARRIER,

Personal Author(s):

WARE, Willis H

Report Date:

25 Nov 1959

Media Count:

12 Page(s)

Report Number(s):

B-147-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses the importance of basic research towards the development of computers which simulate human intelligence.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604541

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONTROL AND SUPPORT SYSTEMS: INTRODUCTION,

Personal Author(s):

Williams,J D

Report Date:

24 Nov 1959

Media Count:

7 Page(s)

Report Number(s):

B-144-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The command, control, and support systems of the Air Force are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604540

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONTROL AND SUPPORT SYSTEMS: SUMMARY AND RECOMMENDATIONS,

Personal Author(s):

Williams,J D

Report Date:

24 Nov 1959

Media Count:

11 Page(s)

Report Number(s):

B-156-1

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The importance and necessity of sponsoring and pushing basic research are examined in light of development hierarchies, economic, and personnel considerations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0613719

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LINEAR PROGRAMMING IN A MARKOV CHAIN,

Personal Author(s):

Wolfe,Philip

Dantzig,G B

Report Date:

23 Nov 1959

Media Count:

20 Page(s)

Report Number(s):

P-1842

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An infinite Markov process with a finite number of states is studied in which the transition probabilities for each state range independently over sets which are either finite or are convex polyhedra. A finite computational procedure is given for choosing those transition probabilities which minimize appropriate functions of the resulting equilibrium probabilities. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616405

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/616405.pdf

Size: 883 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD616405>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BALLISTIC MISSILE PAYLOAD ALLOCATION

Personal Author(s):

Firstman, Sidney I

Report Date:

12 Nov 1959

Media Count:

23 Page(s)

Report Number(s):

P-1839

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) Each element of a ballistic missile's payload--warhead, guidance and penetration aids--will increase in effectiveness with an increase of weight allocated to the element. For a missile that is to be employed against a defended 'point' target, the paper presents a method for determining the optimum division of

the missile's payload between the three competing (for weight) elements, when their individual weight-effectiveness relationships are known. For the case of a single missile per target, using a most basic application of the stepwise optimization philosophy of dynamic programming, the problem is formulated as a two stage weight allocation process. The first stage determines the optimum tradeoff between warhead (lethal radius) and guidance (CEP); the second stage determines the optimum division between penetration aids and an optimum mix of warhead and guidance. The simple arithmetical method that results is demonstrated by an example. The same optimization process is useful for the cases of sequential and simultaneous multiple missile employment per target.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616403

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND NEUTRON TRANSPORT THEORY. V: DIFFUSION AS A LIMITING CASE,

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Wing, G Milton

Report Date:

09 Nov 1959

Media Count:

21 Page(s)

Report Number(s):

P-1835

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

22 - DOCUMENT ILLEGIBLE

Abstract:

(U) Diffusion theory classically has been regarded as an approximation to the more rigorous (but, of course, not completely rigorous) transport theory under the assumption of high velocity and small mean free path. Furthermore, passage to the limit in the 'telegrapher's equation,' a linear partial differential

equation of hyperbolic type, has been carried out. The limits are studied of the non-linear functional equations obtained from the transport processes with finite velocity as the velocity increases without bound. Corresponding results are obtained for heat or diffusion processes, where the physical picture is not as clear. The equations can be interpreted in such a way as to be derived by invariant imbedding techniques. In all cases, the equations are of the generalized Riccati type which are characteristic of these processes of mathematical physics.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616847

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN MACHINE TRANSLATION. 8: MANUAL FOR POSTEDITING RUSSIAN TEXT.

Descriptive Note:

Revised ed.,

Personal Author(s):

Harper,K E

Hays,D G

Scott,B J

Report Date:

07 Nov 1959

Media Count:

38 Page(s)

Report Number(s):

P-1624

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The present study is a practical guide to editors who refine partially machine-translated text as a basis for linguistic analysis. The posteditors' tasks are: to code preferred English equivalents, to code English structural symbols, to resolve grammatic properties, and to code syntactic connections (dependencies). A general introduction to the field of machine translation is contained in RM-2060.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616401

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RATIONAL POINTS ON A TRANSCENDENTAL CURVE,

Personal Author(s):

Gross,O

Report Date:

02 Nov 1959

Media Count:

7 Page(s)

Report Number(s):

P-1831

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A short elementary proof of the irrationality of $(\arctan p)/\pi$ is given, where p is a positive rational number different from unity. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

AD0616399

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC SIMILARITY AND THE MODELING OF CLOUD DROPLETS,

Personal Author(s):

Sartor,J Doyne

Report Date:

30 Oct 1959

Media Count:

7 Page(s)

Report Number(s):

P-1829

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

Abstract:

(U) The motion of cloud droplet pairs can be modeled successfully in the laboratory by a variety of substances as long as R_{18} . Since irregularly shaped particles may be considered as made up of droplet pairs, the fall velocity of irregularly shaped objects can be modeled under the same Reynolds number conditions. If the Reynolds number is kept small with respect to unity, theoretical solutions are evidently possible and the theory could be compared with observation. The coalescence of model droplets cannot be used as a direct indicator of collision, since coalescence depends critically on surface properties including electrostatic effects. (Author)

Abstract Classification:

Unclassified

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616400

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DRAG COEFFICIENTS OF SMALL, IRREGULAR PARTICLES,

Personal Author(s):

SARTOR,J D

Rapp,R R

Report Date:

30 Oct 1959

Media Count:

15 Page(s)

Report Number(s):

P-1830

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This report presents the results of several laboratory tests conducted with spherical and irregularly shaped particles. These measurements were made to clarify the law of fall of irregular particles in the range of Reynolds numbers from 0.035 to 3.5. The results of the experiments are presented in tabular form, and are compared graphically with the theoretical approximation to the rate of fall of spheres and with the accepted curve for spheres. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0462131

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SYSTEMS ANALYSIS AND EDUCATION.

Descriptive Note:

Research memo.,

Personal Author(s):

Kershaw, J A

McKean, R N

Report Date:

30 Oct 1959

Media Count:

64 Page(s)

Report Number(s):

RM-2473-FF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Contents: Explanation of systems analysis; Possibilities of systems analysis in education; Difficulties in the measure of output; Output multi-dimensional; Test scores as measures of one dimension of output; Test scores still multidimensional; Estimating incremental output from new systems; Large-scale statistical analysis; Illustrative test-score exhibits; Estimating incremental costs of new systems; Putting cost and output together to compare systems; Illustrative exhibits and selection of preferred system, interpretation of results; The project of the American Institute for Research; Recommendations and impressions; Systems analyses in education; Impressions concerning certain policies in education.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616407

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VEHICLES FOR EXPLORATION ON MARS,

Personal Author(s):

Cartaino,T F

Report Date:

29 Oct 1959

Media Count:

20 Page(s)

Report Number(s):

P-1841

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

22 - DOCUMENT ILLEGIBLE

Abstract:

(U) A discussion is presented on the kinds of vehicles which might be employed for extensive exploration on Mars after landings by manned expeditions. This preliminary look is intended to answer questions concerning the feasibility of designing such vehicles; however, little effort is made to answer questions concerning the desirability of these vehicles when considered within the context of total expedition requirements. (For example, Martian orbital rendezvous vehicles might be of dual or of multi-purpose design.) The preliminary nature of the discussion is stressed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616380

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A STRUCTURAL APPROACH TO MILITARY AIR TRANSPORTATION,

Personal Author(s):

NISKANEN,W A

Rainey,R B

Report Date:

23 Oct 1959

Media Count:

15 Page(s)

Report Number(s):

P-1826

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) During the next critical decade, what will be the nature and magnitude of the major military airlift missions. In a period of rapid technological change and greatly augmented commercial airlift resources, what will be the best combination of aircraft and trained personnel to perform these missions. These issues must be resolved within the next few years, regardless of the outcome of the current controversy,

in order to build an effective military air transport system for the next decade. This paper discusses the use of various operations research techniques to help resolve these issues.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616379

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MUTUAL ATTRACTION OF CLOUD DROPLETS IN THE ELECTROSTATIC FIELD OF THE
ATMOSPHERE,

Personal Author(s):

Sartor,J Doyne

Report Date:

21 Oct 1959

Media Count:

21 Page(s)

Report Number(s):

P-1824

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616378

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USE OF MAN-MACHINE SIMULATION FOR SUPPORT PLANNING,

Personal Author(s):

Geisler,Murray A

Report Date:

20 Oct 1959

Media Count:

18 Page(s)

Report Number(s):

P-1823

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Support planning under present conditions of rapid exploitation of technological advances to maintain the most advanced weapon inventory creates many new stresses for planning the support of these new weapons. In addition, support planning has always been incomplete in that there has not been a systematic way of adjusting plans to reflect operational experience. The second major experiment of the RAND Logistics Systems Laboratory has produced techniques of support planning for new weapons which may represent major advances in such activities. This paper describes the conditions under which support planning must be performed in the present and future military environment and the experience of LP-II in performing such planning for an ICBM weapon of the 1963-65 time period, as an example. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616402

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MANNED CONTROL OF ORBITAL RENDEZVOUS,

Personal Author(s):

Levin,E

Ward,J

Report Date:

20 Oct 1959

Media Count:

17 Page(s)

Report Number(s):

P-1834

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A device was assembled at The RAND Corporation to simulate the in-plane response of an orbiting space vehicle to applied thrusts. This simulator was used to study manned control of an orbital rendezvous maneuver. It was found that a pilot with appropriate display and controls could direct the extreme terminal portion of the rendezvous maneuver with great precision and flexibility. The fuel consumed during this 'docking' phase of the operation was a very small fraction of the total fuel required to rendezvous and consequently the comparative efficiency of a pilot and an automatic system was not regarded as a major consideration. It was also found that with training a pilot could successfully direct a rendezvous maneuver from large distances. However, properly designed automatic equipment would be significantly more efficient for this phase of the operation and it was concluded, therefore that the pilot's role in the distant closing phase of the rendezvous operation would be limited to override in case of equipment malfunction or in the event that an unusual maneuver seemed necessary. The use of a pilot appeared to be highly desirable for the extreme terminal phase of rendezvous where local decisions and fine vernier corrections might be required. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616377

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME SPECIAL SEARCH PROBLEMS,

Personal Author(s):

Gross,O

Report Date:

20 Oct 1959

Media Count:

18 Page(s)

Report Number(s):

P-1822

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Intuitively, one thinks of a search problem as a puzzle requiring for its solution an efficient technique or algorithm for locating or gaining desirable information about some object. The object may be a physical one or perhaps purely mathematical in character. Without attempting to define precisely what is meant by a search problem per se, (this we leave to the Logicians) the author illustrates various categories and aspects, e.g., game theoretic, sequential minimax, etc., by means of particular typical problems he and his colleague Selmer Johnson, et. al., have solved at RAND. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616376

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EXPERIMENT IN CHESS PLAYING BY MACHINE,

Personal Author(s):

Gruenberger,Fred

Report Date:

13 Oct 1959

Media Count:

11 Page(s)

Report Number(s):

P-1820

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616384

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLAR AURORAL, GEOMAGNETIC, AND IONOSPHERIC DISTURBANCES,

Personal Author(s):

Vestine,E H

Report Date:

07 Oct 1959

Media Count:

7 Page(s)

Report Number(s):

P-1816-NSF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616373

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A PHASE METHOD FOR TREATING STURMLIOUVILLE EQUATIONS AND PROBLEMS,

Personal Author(s):

Wax,Nelson

Report Date:

05 Oct 1959

Media Count:

24 Page(s)

Report Number(s):

P-1812

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616367

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FEDERAL BUDGET AS AN INDICATOR OF GOVERNMENT INTENTIONS AND THE IMPLICATIONS OF INTENTIONS,

Personal Author(s):

Novick,David

Report Date:

01 Oct 1959

Media Count:

25 Page(s)

Report Number(s):

P-1803

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to consider briefly the extent to which the budget can be visualized as an indicator of government intentions and, perhaps more importantly, as an indicator of the implications of these intentions. This is done with respect to both the current budget structure and possible alternative structures. Particularly in conjunction with the latter, illustrative examples are used at various points in the discussion. For the most part, these are drawn from a national security context. The reasons for this are: (1) The defense area currently accounts for well over half the total federal

budget and has by far a greater impact on the economy than any other single sphere of governmental activity; (2) The decision-making and administrative problems are probably as difficult--perhaps more so--in this area as in any other; and (3) The author's experience in recent years has stemmed primarily from dealing with defense problems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616375

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONTINUOUS PROGRAMMING METHODS ON AN ANALOG COMPUTER,

Personal Author(s):

DeLand,E C

Report Date:

29 Sep 1959

Media Count:

12 Page(s)

Report Number(s):

P-1815

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A feasible solution of a programming problem, in which a positive vector x maximizes a function $g(x)$ under m convex conditions $f_i(x) \leq 0$ usually exhibits certain stable properties and the entire system can be said to be in equilibrium or that it is an equilibrium model. Beginning at a solution, a time transient may be induced in the system by making f and/or g functions of time. Methods for examining such transients on the analog computer are examined with examples. The problem considered here arises because often the behavior of a system in time under the influence of a variation of parameters is as interesting as the initial or final stable states. Typical examples are found in a petroleum fractionating column or a complex chemical equilibrium.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616371

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME ASPECTS OF ADAPTIVE CONTROL PROCESSES,

Personal Author(s):

Kalaba,Robert

Report Date:

29 Sep 1959

Media Count:

19 Page(s)

Report Number(s):

P-1809

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0246199

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/246199.pdf

Size: 11 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD246199>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A MATHEMATICAL MODEL OF THE HUMAN EXTERNAL RESPIRATORY SYSTEM

Personal Author(s):

DANTZIG, GEORGE B

DEHAVEN, JAMES C

COOPER, IRWIN

JOHNSON, SELMER M

DELAND, EDWARD C

KANTER, HERSCHEL E

SAMS, CRAWFORD F

Report Date:

28 Sep 1959

Media Count:

103 Page(s)

Report Number(s):

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616381

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND CLASSICAL ANALYSIS,

Personal Author(s):

Bellman, Richard

Report Date:

28 Sep 1959

Media Count:

22 Page(s)

Report Number(s):

P-1804

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Over the last ten years, research in the field of dynamic programming has assumed many different forms. Sometimes, the emphasis has been upon questions of formulation in analytic terms and concepts, sometimes upon the problems of existence and uniqueness of solutions of the functional equations derived from the underlying processes, occasionally upon the actual analytic structure of the solutions of these equations, sometimes upon the computational aspects; and sometimes upon the applications-to control processes, to trajectories of various types, to operations research, to mathematical economics. Inevitably, the result of this quasi-ergodic behavior has been to ignore a number of significant problems, and to treat a number of others in cavalier fashion. In this exposition, we wish to focus attention upon a number of interesting, difficult, and significant questions in analysis which arise naturally out of the functional equation technique of dynamic programming. Our aim is to show that this theory constitutes a natural extension of classical investigations and that the corresponding problems are natural generalizations of problems of classical analysis.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616368

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FAILURE OF THE UNIVERSITIES. I: SCIENTIFIC AND TECHNOLOGICAL,

Personal Author(s):

Bellman,Richard

Report Date:

28 Sep 1959

Media Count:

31 Page(s)

Report Number(s):

P-1805

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion is presented on the lack of universality of the university, of the artificial images of the 'intellectual man' and the 'practical man,' and, generally, of life, liberty, and the pursuit of knowledge.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0232651

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MATERIALS-INPUT INDEX OF SOVIET CONSTRUCTION, REVISED AND EXTENDED

Personal Author(s):

POWELL, RAYMOND P

Report Date:

28 Sep 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616372

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MATHEMATICAL MODEL OF THE HUMAN EXTERNAL RESPIRATORY SYSTEM,

Personal Author(s):

Dantzig, George B

DeHaven, James C

Cooper, Irwin

Johnson, Selmer M

Sams, Crawford F

Report Date:

28 Sep 1959

Media Count:

101 Page(s)

Report Number(s):

P-1811

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Microfiche only after original copies exhausted.

Abstract:

(U) This study examines the thesis that a part of the human physiological system can be simulated by a suitably constructed mathematical model. The model employed derives from a class of mathematical programming methods that were originally developed for representing complex military and industrial activities and have recently been used to represent involved chemical equilibria. The motivation for this research is the longrange view that a successful mathematical simulation of the human system or of human subsystems would provide an important tool for biological investigations. A sufficiently complex mathematical model - that is, a model that embodies sufficient chemical and biological detail to represent a whole, functioning human system or subsystem - could be used to explore biological hypotheses, environmental stress reactions, and interplay of dependent sybsystems, and could serve as a pedagogical tool or even as an aid to medical diagnosis.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616366

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DIRECTIONS OF MATHEMATICAL RESEARCH IN NONLINEAR CIRCUIT THEORY,

Personal Author(s):

Bellman,Richard

Report Date:

23 Sep 1959

Media Count:

46 Page(s)

Report Number(s):

P-1802

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616365

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SCIENTIST'S NOTES ON THE COLD WAR,

Personal Author(s):

Wilson,A G

Report Date:

18 Sep 1959

Media Count:

21 Page(s)

Report Number(s):

P-1801

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Personal impressions of the cold war are discussed by an American scientist who travelled around the world last year attending scientific conferences, including the Tenth General Assembly of the International Astronomical Union at Moscow. The non-technical side lights on the cold war struggle which are reported here point out the ubiquity of the present conflict.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0663408

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NORMATIVE INTEREST RATE,

Personal Author(s):

Berman,E B

Report Date:

15 Sep 1959

Media Count:

41 Page(s)

Report Number(s):

P-1796

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The normative interest rate is defined as the discount rate the government ought to use in making its investment decisions. In the following sections various alternative ways of setting the level of the normative interest rate are examined. The return on the marginal private investment, the national time preference, and the long-term interest rate at which the government can borrow are all rejected on the

basis that they are merely adaptive to the nation's interest rate structure which is determined in turn by the government itself. The concept of a positive national time preference is rejected for society as a whole, although it is considered appropriate for the individual because of his mortality. A zero normative interest rate is also rejected for society because of the declining marginal utility of a growing national product. The appropriate normative interest rate is then determined as a rate that is consistent with itself through the rate of growth of national product and the rate of decline in the marginal utility of national product that it implies.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0610829

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYSTEMS DESIGN FOR MANAGEMENT AUTOMATION,

Personal Author(s):

POSTLEY,J A

Report Date:

28 Aug 1959

Media Count:

11 Page(s)

Report Number(s):

P-1783

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Automatic data processing systems are defined as those systems which encompass the functions of introducing information into a management system, storing it into automatic files, processing it automatically, and making the results available where they are required in the system. Systems design is defined as the detailed specification of the information flow which must occur within the given organizational framework. The nature and purpose of systems design are described, as are the environment which must be created so that it can take place and some of the newly known procedures which the design involves. The conclusions are that the problems of applying scientific disciplines and

automatic techniques to management-type operations require changes in the techniques for designing the corresponding systems. The capability to design these systems requires the simultaneous consideration of functional interactions and great detail within each function, this requirement imposing a demand for new skills in systems design.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0700756

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHAT DO WE MEAN BY 'RESEARCH AND DEVELOPMENT',

Personal Author(s):

Novick,David

Report Date:

25 Aug 1959

Media Count:

51 Page(s)

Report Number(s):

P-1779

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

PORTIONS OF THIS DOCUMENT ARE NOT FULLY LEGIBLE.

Abstract:

(U) Contents: Science, research and development (science, application and certainty); Each step: Its promise and demands (milestones in fission, science and laboratory, distribution of effort); Available statistical data.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA951912

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Survival Position Location Using Star Sighting,

Personal Author(s):

Sharkey,E H

Report Date:

20 Aug 1959

Media Count:

18 Page(s)

Report Number(s):

RAND/P-1764

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616370

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TABLES OF THE BINOMIAL PROBABILITY DISTRIBUTION $B(R;N,P)$ FOR LARGE N AND SMALL P,

Personal Author(s):

Hopp,D S

Warshaw,M

Report Date:

13 Aug 1959

Media Count:

91 Page(s)
Report Number(s):
P-1807
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0615887
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) RECENT EFFORTS TOWARD COORDINATED ECONOMIC PLANNING IN THE SOVIET BLOC,
Personal Author(s):
Hoeffding, Oleg
Report Date:
07 Aug 1959
Media Count:
25 Page(s)
Report Number(s):
P-1768
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purposes of the paper are (1) to review the record of the Soviet Bloc's Council on Economic Aid (CEMA) during the first 2 phases of its 10-year history (January 1949 through 1953, and 1954 until the middle of 1957, following the East European crises of 1956), and (2) to appraise principal features of the pattern of economic cooperation shaping up currently between the USSR and Eastern Europe. (Prepared for delivery at the 1959 annual meeting of the American Political Science Association, Washington, Sept. 10-12, 1959).

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605102

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METEORIC INTERACTION WITH THE ATMOSPHERE; THEORY OF DRAG AND HEATING AND
COMPARISON WITH OBSERVATIONS,

Personal Author(s):

Gazley, Carl, Jr

Report Date:

Aug 1959

Media Count:

78 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The entry of meteoroids into the earth's atmosphere involves velocities higher than presently available in any terrestrial laboratory facility. While meteoric interaction with the atmosphere obviously does not provide a controlled type of experiment and many of the test conditions must be deduced indirectly, it offers the opportunity of aerodynamic data at extreme velocities and altitudes. Extensive observations of meteor velocity, luminosity, and altitudes, together with atmospheric-density observations, now enable certain deductions to be made about the aerodynamic drag and heating. Comparison is made between meteor theory and observations in an attempt to obtain information about the mechanisms of aerodynamic drag, aerodynamic heating, and surface ablation. General analytical expressions are developed for meteoroid deceleration, mass loss, and luminosity. The results of this analysis are expressed in terms of the observational quantities and compared with the more reliable measurements. This comparison indicates that the extension of conventional free-molecule aerodynamics to the meteor case appears to be justified. (Author)

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0636104

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN OUTSIDER SURVEYS THE PLACE OF PUBLIC ADMINISTRATION RESEARCH.

Personal Author(s):

Pardee, F S

Report Date:

20 Jul 1959

Media Count:

11 Page(s)

Report Number(s):

P-1756

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An inquiry is made into the research essential for imparting to mankind an intuitive common sense, for providing a substitute for experience, i.e. a placement in context, and a visualization, of an actual event prior to its occurrence. This will be essential because of the need to deal with a more integrated populace or socialized economy, a more technically oriented world, and a more rapidly moving way of life. Four general fields are suggested for study (1) improvement and expansion of the breadth of techniques and tools of management and administration, (2) further investigation of the art of leadership and followership including such subjects as communication, motivation phenomena, and mass psychology, (3) organization of a simplified comprehensible body of information on the impact of probable advancement in the physical sciences, and, (4) more complete codification of political theory and the history of political thought. Implications are given for the development of informed human beings capable of coping with life during the remainder of this century.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0222667
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) DEPENDENCE OF EAST GERMANY ON WESTERN IMPORTS
Descriptive Note:
Research memo.,
Personal Author(s):
MENDERSHAUSEN, HORST
Report Date:
17 Jul 1959
Media Count:
52 Page(s)
Report Number(s):
RM-2414
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0606441
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A LINEAR DIOPHANTINE PROBLEM,
Personal Author(s):
Johnson,S M
Report Date:
16 Jul 1959
Media Count:
19 Page(s)
Report Number(s):

P-1115

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Given a relatively prime set of integers a_1, a_2, a_3 , the author finds the largest integer B not represented in the form $xa_1 + ya_2 + za_3$, for positive integers x, y, z . In doing so, several relations are developed which may be of interest in themselves. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0227738

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/227738.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD227738>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE FLIGHT OPERATIONS PLANNER

Descriptive Note:

Research memo.

Personal Author(s):

JONES, W M

SHAPIRO, MARVIN B

SHAPIRO, NORMAN Z

Report Date:

16 Jul 1959

Media Count:

99 Page(s)

Report Number(s):

RM-2415

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

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Approved for public release; distribution unlimited

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606939

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A FIRST EXPERIMENT IN LOGISTICS SYSTEM SIMULATION,

Personal Author(s):

Geisler,Murray A

Report Date:

01 Jul 1959

Media Count:

1 Page(s)

Report Number(s):

P-1415

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0605673
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ESTIMATING PERSONNEL AND EQUIPMENT REQUIREMENTS,
Personal Author(s):
Haythorn,W W
Pickrel,E W
Report Date:
01 Jul 1959
Media Count:
1 Page(s)
Report Number(s):
B-129
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0240432
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/240432.pdf
Size: 2 MB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD240432>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) A REVIEW OF BINARY BOUNDARY LAYER CHARACTERISTICS
Personal Author(s):
GROSS, J F
HARTNETT, J P
MASSON, D J
GAZLEY JR, C

Report Date:

18 Jun 1959

Media Count:

105 Page(s)

Report Number(s):

RAND-RM-2516

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) For several years RAND has investigated means of applying principles of mass-transfer and ablation cooling to problems of atmospheric reentry and to the design of efficient hypersonic flight vehicles. In connection with ablation cooling, this research memorandum examines the binary boundary layer problem. The study should make possible more rapid and reliable estimates of surface cooling methods for use with hypersonic vehicles such as intercontinental ballistic missile nose cones. A binary boundary layer is one in which some foreign substance has been injected to alter the properties of the flow, notably its heat transfer characteristics. Several methods available for accomplishing this injection, or mass transfer, are the transpiration of gas through slots, and the ablation or sloughing away of surface particles. The mechanism of laminar binary boundary layer flow is discussed in mathematical terms, and five different analyses involving a variety of injected substances are reviewed. Generalized expressions are then developed for predicting heat transfer and skin friction performance in the presence of mass transfer cooling for laminar flow over a flat plate. The results indicate that different foreign materials (for example, hydrogen, carbon dioxide, and iodine vapor) injected into the boundary layer stream reduce heat transfer and skin friction coefficients by an amount which depends on the molecular weight of the injected material. In conclusion, mass transfer cooling in a turbulent boundary layer and sublimation cooling are considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606862

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SPACE VEHICLE ENVIRONMENT,

Personal Author(s):

GAZLEY,C ,Jr

kellogg,W W

Vestine,E H

Report Date:

15 Jun 1959

Media Count:

64 Page(s)

Report Number(s):

P-1335

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the report is to estimate and discuss various physical space attributes of the natural environment in the solar system. In particular the discussion will be concerned with a cursory survey of the characteristics of solar radiations, the effects of solar and other thermal radiations on vehicle temperature, the characteristics of the earth's magnetic fields and other magnetic fields in space, the earth's exosphere and the solar corona, cosmic rays, and meteoroids. Estimates of the probability of space vehicle skin penetration by meteoroids are also presented. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0612428

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MILITARY RADIO COMMUNICATIONS EQUIPMENT TRADE-OFFS,

Personal Author(s):

Ports,Delmer C

Crenca,J J

Heisler,K

Report Date:

12 Jun 1959

Media Count:

20 Page(s)

Report Number(s):

P-1724

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper describes the development of empirical relationships of design-cost based on the characteristics of a comparatively large-number of existing and developmental military radio communications equipments. The use of such relationships in the construction of performance-cost trade-offs is illustrated. The work was carried out as part of a larger research effort designed to study all of the relationships required for communication system planning. Preliminary study indicated that for most types of existing and developmental military radio equipment, given power output only, a cost estimate may be obtained which is accurate within a factor of about three. If a second parameter is specified such as type of installation, frequency range, or type of modulation, an estimate accurate to within a factor of about 1.5 may be obtained.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606855

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON SOME COMMUNICATION NETWORK PROBLEMS,

Personal Author(s):

Kalaba,Robert

Report Date:

03 Jun 1959

Media Count:

38 Page(s)

Report Number(s):

P-1325

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Several classes of combinat2rial problems in the field of communication networks are discussed including the leasing of minimal cost spanning networks, the finding of optimal paths through networks, and the optimal routing of messages in networks. The methods employed involve curious admixtures of the functional equation approach of dynamic programming, linear programming, and various ad hoc procedures.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224281

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) WHAT HAVE COMPUTERS TO DO WITH MANAGEMENT.

Personal Author(s):

Simon, H A

Newell, A

Report Date:

21 May 1959

Media Count:

34 Page(s)

Report Number(s):

P1708

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0663392

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/663392.pdf

Size: 635 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD663392>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SPACE INVESTIGATION IN THE USSR--PAST, PRESENT, AND FUTURE

Personal Author(s):

Krieger, F J

Report Date:

15 May 1959

Media Count:

12 Page(s)

Report Number(s):

P-1702

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A nontechnical discussion is presented of past accomplishments and future plans in space exploration.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0726037

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Aggregation of Servicing Facilities in Queueing Processes,

Personal Author(s):

Hooper,J W

Stoller,D S

Report Date:

12 May 1959

Media Count:

12 Page(s)

Report Number(s):

P-1685

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is concerned with the problem of finding the conditions under which individual service facilities should be aggregated in order to perform a certain workload in an optimal way. This is a problem of widespread application to the many production or repair activities which are characterized by a stochastic flow of workload units through a service facility. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0295044

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /U2/295044.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD295044>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A BROAD LOOK AT THE PERFORMANCE OF INFRARED DETECTORS

Personal Author(s):

GELINAS, R W

GENOUD, R H

Report Date:

11 May 1959

Media Count:

44 Page(s)

Report Number(s):

P-1697

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The capabilities of present day infrared detectors from a more or less absolute viewpoint, i.e., in terms of radiant power and time are discussed. The intent was purposely to suppress many of the fine points in order to attain a perspective of the subjects. This method of approach starts with a derivation of the performance limits for ideal detectors, thus establishing a basis of comparison for real detectors. The derivations include both the limits set by background fluctuation and by signal fluctuations. Next some recent data on detector performance are reduced to a form allowing intercomparisons. Our method stresses the fundamental fact that the minimum detectable power is directly related to the time taken for the detection process or, more loosely, to the time constant of the detector.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0724275

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Content of Economics,

Personal Author(s):

Hoag,Malcolm W

Report Date:

08 May 1959

Media Count:

11 Page(s)

Report Number(s):

P-1692

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is intended as a brief summary of the discipline of economics for operations researchers who have not been trained in the social sciences.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0625353

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MACRO ANALYSIS OF MILITARY AIR TRANSPORTATION,

Personal Author(s):

NISKANEN,W A

Report Date:

06 May 1959

Media Count:

10 Page(s)

Report Number(s):

P-1690

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Programming techniques are discussed for guidance in determining (1) the nature and magnitude of the major military airlift missions and (2) the best combination of airlift resources for performing these missions. A program was developed that selects the feasible set of airlift activities that meets a given set of mission requirements at a minimum total system cost; the total number of aircraft of a specific type in the minimum cost fleet must not exceed the sum of the beginning inventory plus the production availability.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0220605

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE BASE MAINTENANCE-OPERATIONS MODEL USED IN RAND LOGISTICS RESEARCH

Descriptive Note:

Research memo.,

Personal Author(s):

LEVINE,R A

RAINEY,R B

Report Date:

04 May 1959

Media Count:

43 Page(s)

Report Number(s):

RM-2374

Contract Number:

AF 33(038)-6417

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606903

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE SHORTEST ROUTE THROUGH A NETWORK,

Personal Author(s):

Dantzig, George B

Report Date:

29 Apr 1959

Media Count:

8 Page(s)

Report Number(s):

P-1345

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The chief feature of the method is that it fans out from the origin working out the shortest path to one new node from the origin and never having to backtrack. No more than $n(n-1)/2$ comparisons are needed to find the shortest route from a given origin to all other nodes and possibly less between two fixed nodes. Except for details and bias of various authors towards a particular brand of proof, this problem has been solved the same way by many authors. This paper refines these proposals to give what is believed to be the shortest procedure for finding the shortest route when it is little effort to arrange distances in increasing order by nodes or to skip consideration of arcs into nodes whose shortest route to the origin has been determined earlier in the computation. In practice the number of comparisons is much less than indicated bounds because all arcs leading to nodes previously evaluated are deleted from further consideration. A further efficiency can be achieved in the event of ties by including least distances from origin to many nodes simultaneously during the fanning out process. However, these are shown as separate steps to illustrate the underlying principle. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA953506

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Triangle. Man, Machine, Space,

Personal Author(s):

Cooper,I

Report Date:

29 Apr 1959

Media Count:

20 Page(s)

Report Number(s):

P-1680

SBI-AD-F630 435

Monitor Series:

AD-F630 435

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Several factors have been considered influential to the development and present status of man-machine studies as a science. The newness, naivete, data limitations and trans-disciplinary nature of this field's operations are discussed briefly in the hope that such discussion will make clearer the role man-machine science is playing today in space flight. Some of the physiological factors explicit for space operations are brought into focus so as to examine what partition or merging of men and machines are indicated in space vehicles. A philosophical viewpoint that better describes functional areas men or machines can be assigned to is given with certain reservations, mainly those of definition and mission identity. The use of intelligent simulation techniques is suggested as being a more sophisticated way of obtaining and processing data from experimental man-machine systems. Systematic and consistent consideration of the physiological facts of life regarding space travel are considered necessary for reliable human input data.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606538

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL APPROXIMATIONS AND DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman,Richard

Dreyfus,Stuart

Report Date:

28 Apr 1959

Media Count:

12 Page(s)

Report Number(s):

P-1176

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper indicates some ways in which the theory of approximation can be used to increase the range of present day computers. Although the primary interest is in applying these techniques to the functional equations occurring in the theory of dynamic programming. These same methods are applicable, and even more readily, to the classical functional equations of mathematical physics. The objective of the paper is to trade additional computing time, which is expensive, for additional memory capacity, which does not exist.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607678

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPROXIMATION ALGORITHM FOR AN OPTIMUM AIM POINTS PROBLEM,

Personal Author(s):

Firstman, Sidney I

Report Date:

22 Apr 1959

Media Count:

30 Page(s)

Report Number(s):

P-1678

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An algorithm to solve the particular problem of assigning weapons over a target complex in an effective manner is considered. The case of where to attach a city-target complex with six missiles of 1/2-MT yield which are delivered according to a circular normal distribution is examined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0665831

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/665831.pdf

Size: 268 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD665831>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MEASURING THE RELIABILITY OF EQUIPMENT IN OPERATING ENVIRONMENTS

Personal Author(s):

Stoller, David S

Report Date:

21 Apr 1959

Media Count:

9 Page(s)

Report Number(s):

RAND-P-1672

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The purpose of this paper is to discuss some of the concepts and problems pertinent to the measurement of reliability.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0636171

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUPPLY AND DEPOT-REPAIR INTERACTIONS: A CASE STUDY OF ELECTRONICS SUPPORT.

Personal Author(s):

PETERSEN, J W

Paulson, R M

Steger, W A

Report Date:

16 Apr 1959

Media Count:

60 Page(s)

Report Number(s):

RM-2365

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This memorandum examines the relation between spares investment and the length of the depot repair-cycle. There is an economic tradeoff between supply-cost and depot repair-action, and it would pay to reduce the repair cycle as long as the supply-savings per unit-reduction remained greater than the cost of achieving the reduction. The procedure used to study the above tradeoff was to postulate a specific reduction in repair-cycle time, and balance the resultant supply-savings against the costs of achieving it. The study used a sample of 50 depot-reparable airborne fire-control spare items upon which to base the estimates of savings and costs. The results of the study demonstrate the importance of including the supply-cost implications of repair-cycle length as an explicit element in planning repair capability, and as a criterion of depot performance. Support costs are joint costs; to judge depot performance on the sole basis of repair cost is far too narrow. The goal should be to achieve that mix of supply and maintenance resources which will minimize the joint costs. This study indicates that the potential savings to be realized by a more explicit consideration of this proper mix are not trivial, especially since this holds for all depot-reparable items.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0639559

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROTECTION OF COMMUNICATIONS AND ELECTRONIC SYSTEMS.

Personal Author(s):

ELDRIDGE, F R

Report Date:

13 Apr 1959

Media Count:

14 Page(s)

Report Number(s):

P-1657

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

22 - DOCUMENT ILLEGIBLE

Abstract:

(U) In order to protect vital communications circuits for hardened sites, it may be necessary to resort to the use of many different types of communication systems which are independently vulnerable to the various methods which could be used to disrupt them. Hardening as well as dispersal will be required. By means such as these it appears feasible to meet the growing wartime threats to communications and electronic systems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0213477

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET NATIONAL INCOME AND PRODUCT, 1949-1955

Descriptive Note:

Research memo.,

Personal Author(s):

HOEFFDING, O

NIMITZ, N

Report Date:

06 Apr 1959

Media Count:

219 Page(s)

Report Number(s):

RM-2101

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606274

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SIMPLEX METHOD FOR QUADRATIC PROGRAMMING,

Personal Author(s):

Wolfe, Philip

Report Date:

01 Apr 1959

Media Count:

1 Page(s)

Report Number(s):

P-1205

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A computational procedure is given for finding the minimum of a quadratic function of variables subject to linear inequality constraints. The procedure is analogous to the Simplex Method for linear programming, being based on the Barankin-Dorfman procedure for this problem. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0613685

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MACHINE ANALYSIS METHODS FOR NETWORK VULNERABILITY PROBLEMS,

Personal Author(s):

JUNCOSA,M L

Report Date:

25 Mar 1959

Media Count:

26 Page(s)

Report Number(s):

P-1723

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Abstract:

(U) A brief review of some optimization problems involving communication networks that are usually of such size as to require a high-speed computer for solution. Some parallelisms and translations between different problems are also illustrated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224277

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE ADVANTAGES OF FUNCTIONAL PACKAGING OF ELECTRONIC EQUIPMENT.

Personal Author(s):

Sharkey, E H

Report Date:

11 Mar 1959

Media Count:

8 Page(s)

Report Number(s):

P1629

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616846

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ORDER OF SUBJECT AND OBJECT IN SCIENTIFIC RUSSIAN WHEN OTHER DIFFERENTIA ARE LACKING,

Personal Author(s):

HAYS,D G

Report Date:

11 Mar 1959

Media Count:

8 Page(s)

Report Number(s):

P-1632

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Conclusions: On the basis of a preliminary study of the 56 relevant instances in 22,000 running words of text, it was concluded that if two nouns in a sentence cannot be distinguished as subject and object of a transitive verb by their morphological properties, and if one precedes the verb while the other follows,

the first noun is the subject. This rule, together with adequate coverage of idioms, appears entirely effective. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0654635

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DESIGN AND COST CONSIDERATIONS FOR HIGH-ALTITUDE AIRCRAFT SYSTEMS,

Personal Author(s):

Cartaino,T F

Report Date:

10 Mar 1959

Media Count:

24 Page(s)

Report Number(s):

P-1655

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The significant factors involved in the design of aircraft for high altitude flight are discussed within the context of a patrol or endurance application. Because of this mission constraint, only subsonic aircraft configurations with non-afterburning turbojet engines are considered. Some of the design limitations imposed by the present state-of-art are explored. The incremental cost of high altitude flight is indicated and the interaction between cost and possible operational requirements is briefly investigated. Finally, some of the possible areas for future improvement in altitude performance are delineated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0613686

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE BOTTLENECK ASSIGNMENT PROBLEM,

Personal Author(s):

Gross,O

Report Date:

06 Mar 1959

Media Count:

11 Page(s)

Report Number(s):

P-1630

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A simple algorithm for solving either of two different bottleneck assignment problems is described in this paper. The one problem requires finding an assignment of men to machines in a serial production line to maximize the rate of flow through the line; the other requires finding an assignment for parallel production lines (one man per line) so as to minimize the time to do a given job. The two problems are essentially identical. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0701794

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PARTITIONING METHODS IN LATENT CLASS ANALYSIS,

Personal Author(s):

Madansky,Albert

Report Date:

06 Mar 1959

Media Count:

32 Page(s)

Report Number(s):

P-1644

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method of obtaining estimates of the parameters of the latent class model based on first classifying individuals into 'latent classes' according to some rule is presented. Properties of the estimates and implications to the identifiability problem are discussed. An example of the use of the partitioning method, contrasting it with the determinantal method, is given. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0636172

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LUNAR EXPLORATION BY PHOTOGRAPHY FROM A SPACE VEHICLE.

Personal Author(s):

DAVIES, Merton E

Report Date:

05 Mar 1959

Media Count:

24 Page(s)

Report Number(s):

P-1671

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper describes a camera which, as the payload of an early space vehicle, could photograph the moon. The resulting pictures would be superior to those obtained either by telescope, such as the 200-in. Mt. Palomar telescope or by television camera, such as those carried by Pioneers I and III. The film would be returned to earth in a recoverable capsule. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0609585

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHY THE USA IS STRAINING TO GET INTO OUTER SPACE,

Personal Author(s):

ALEXANDROV,N A

Report Date:

26 Feb 1959

Media Count:

9 Page(s)

Report Number(s):

T-112

TT-59 10984

Monitor Series:

59 10984

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The use of outer space, 'sky spies', 'reconnaissance satellites', etc. by the United States is deplored by the Soviet Union.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0337920

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/337920.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD337920>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SUMMARY REPORT OF RAND WORK ON THE AFSWP FALLOUT PROJECT

Descriptive Note:

Research memorandum

Personal Author(s):

Rapp, R R

Report Date:

25 Feb 1959

Media Count:

74 Page(s)

Report Number(s):

RAND-RM-2334

DASA-1134

XD-1134

Monitor Series:

1134

DASA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This report is a summary of the work done at The RAND Corporation on the radioactive fallout program of the Armed Forces Special Weapons Project. It discusses the best fit to the parameters which enter into the computation of radio active fallout and the sensitivity of the final pattern to changes in these parameters. It is concluded that fallout forecasts can be made which, though not extremely accurate, can be of great value in operational problems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0655338

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/655338.pdf

Size: 918 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD655338>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROPOSAL FOR A 'SMOG TAX'

Personal Author(s):

Fort, D M

Niskanen, W A

Pascal, A H

Sharpe, W F

Report Date:

25 Feb 1959

Media Count:

28 Page(s)

Report Number(s):

RAND/P-1621-RC

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The Smog Tax is designed to give the individual the widest possible latitude in choosing those anti-smog actions most appropriate to his personal circumstances. It affords the fairest possible treatment of individuals in different circumstances, with different types of cars, different transportation needs, different driving habits, and different viewpoints. Each individual is penalized according to his output of pollutants. In a program aimed at the significant reduction of air pollutant output, this formula, is as fair and effective as any that can be derived.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0423467

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMINE AND ADAPTIVE PROCESSES--I: MATHEMATICAL FOUNDATION,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Report Date:

06 Feb 1959

Media Count:

23 Page(s)

Report Number(s):

P1416

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A foundatio is laid for a mathematical theory of a significant class of decision processes which have not as yet been studied in any generality. These processes, which are described in some detail, are

referred to as adaptive. They arise in practically all parts of statistical study, practically engulf the field of operations research, and play a paramount role in the current theory of stochastic control processes of electronic and mechanical origin. All three of these domains merge in the consideration of the problems of communication theory. The functional equation approach of dynamic programming enables us to treat some of these problems by analytic means, and to resolve others, where direct analysis is stymied, by computational techniques. General questions are treated in an abstract manner. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0639558

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF RANDOM AND PERIODIC DATA SAMPLING FOR THE DETECTION OF SIGNALS IN NOISE.

Personal Author(s):

Middleton,David

Report Date:

01 Feb 1959

Media Count:

31 Page(s)

Report Number(s):

P-1642

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Thershold coherent and incoherent detection of signals in normal noise is examined when random data sampling is employed at the receiver. The resulting optimum system and its thershold performance are compared with the corresponding cases where periodic sampling is used. Expressions for the szstem structure, the error probabilities, and the Bayes risk are obtained; for most of the specific examples examined it is found that periodic sampling gives better performance than random sampling. A discussion of the generality of these results is given in the concluding section. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606202

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WORLD-WIDE HISTORIC VICTORY OF THE SOVIET PEOPLE,

Report Date:

29 Jan 1959

Media Count:

36 Page(s)

Report Number(s):

T-110

TT-59-10556

Monitor Series:

59-10556

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) From a political viewpoint, this editorial is an exposition of the current Soviet view on the causes and results of World War Two. From a military viewpoint the editorial contains a number of interesting points for a Western reader: (1) Some indications of the weakness in Soviet military thinking and planning in the pre-World War Two Period; (2) An enumeration of problems in the area of strategy and tactics to which Soviet planners are called upon to devote their attention if they are to be prepared for future emergencies; (3) A discussion of factors, operative in the current international framework and now in evidence, which constitute long-range warning signs of possible war in the future. (Translator)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616512

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EVALUATION OF THE EFFECT OF THE ENVIRONMENT ON A COMPLEX OPERATION,

Personal Author(s):

Sartor,J Doyne

Report Date:

29 Jan 1959

Media Count:

14 Page(s)

Report Number(s):

P-1895

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Microfiche only.

Abstract:

(U) The integrated effect of the environment on a complex operation is discussed and a method for quantitative evaluation presented. The method may be employed directly in a climatological study of an operation. The total cost of an operation can be obtained in this way using climatological information and forecast data. A comparison of these costs can be used to determine the relative value of forecasts. The method is applied to a reconnaissance operation as an example of its use in a climatological study.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422573

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PROCESSES OF CREATIVE THINKING,

Personal Author(s):

Newell,A

Shaw,J C

Simon,H A

Report Date:

28 Jan 1959

Media Count:

82 Page(s)

Report Number(s):

P1320

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) We ask first whether we need a theory of creative thinking distinct from a theory of problem solving. Subject to minor qualifications, we conclude there is no such need - that we call problem solving creative when the problems solved are relatively new and difficult. Next, we summarize what has been learned about problem solving by simulating certain human problem solving processes with digital computers. Finally, we indicate some of the differences in degree that might be observed in comparing relatively creative with relatively routine problem solving. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0613990

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME RESULTS AND PROBLEMS IN STOCHASTIC LINEAR PROGRAMMING,

Personal Author(s):

Madansky,Albert

Report Date:

19 Jan 1959

Media Count:

21 Page(s)

Report Number(s):

P-1596

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Results and problems in the ordinary 'here-and-now' and 'wait-and-see' stochastic linear programming problems are described. A general formulation of the 'here-and-now' problem is presented, and an approach for solving a special kind of 'here-and-now' problem is suggested. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224139

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TERMS OF TRADE BETWEEN THE SOVIET UNION AND SMALLER COMMUNIST COUNTRIES, 1955 TO 1957,

Personal Author(s):

Mendershausen, Horst

Report Date:

18 Jan 1959

Media Count:

56 Page(s)

Report Number(s):

P-1598

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606942

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SEMI-GROUPS OF CLASS (C SUB O) IN L SUB P DETERMINED BY PARABOLIC DIFFERENTIAL EQUATIONS,

Personal Author(s):

Mullikin, Thomas W

Report Date:

09 Jan 1959

Media Count:

12 Page(s)

Report Number(s):

P-1422

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An application is made of the semi-group theory of E. Hille and R. S. Phillips to mixed initial-boundary value problems for non-singular parabolic differential equations in two variables.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0616845

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USE OF MACHINES IN THE CONSTRUCTION OF A GRAMMAR AND COMPUTER PROGRAM FOR STRUCTURAL ANALYSIS,

Personal Author(s):

HARPER,K E

Hays,D G

Report Date:

09 Jan 1959

Media Count:

15 Page(s)

Report Number(s):

P-1588

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper describes progress made on the building of a descriptive grammar of Russian with the complementary efforts of linguists and digital computers. The method of research is described, emphasizing the analysis by which the work of human translators is converted into a program of computer instructions. A computer program for sentence-structure determination is outlined; this program is considered the key to accurate machine-translation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604544

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CENTRALIZATION AND DECENTRALIZATION IN ECONOMIC ORGANIZATIONS,

Personal Author(s):

Marschak,T A

Report Date:

07 Jan 1959

Media Count:

57 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper concerns an economic organization which is an abstraction from the profit-maximizing firm. It concerns the problem which confronts the organization when it has to choose between alternative schemes, exhibiting varying 'degrees' of centralization, for sharing among its members the task of regularly revising its decisions in the face of a changing environment. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606920

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TALMUDISM IN SOVIET POLITICS,

Personal Author(s):

Rush, Myron

Report Date:

02 Jan 1959

Media Count:

1 Page(s)

Report Number(s):

P-1373 REV.

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The researches of talmudists, just as all serious studies of current Soviet politics, can usefully contribute to academic research on the Soviet political system. They can provide valid evidence on important problems, bring plausible hypotheses to areas of admitted ignorance, and raise provocative objections to views held uncritically. More generally, they can stimulate reflection on the very nature of the Soviet political system.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0261649

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME OBSERVATIONS ON POLITICAL GAMING

Personal Author(s):

GOLDHAMER, HERBERT

SPEIER, HANS

Report Date:

Jan 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

20 - JOURNAL ARTICLES; DTIC USERS ONLY

Distribution Statement:

No Foreign

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA280683

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Space Handbook: Astronautics and its Applications.

Report Date:
29 Dec 1958
Media Count:
257 Page(s)
Report Number(s):
XC-USAF
Monitor Series:
USAF
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0224135
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) THE ECONOMIC ANALYSIS OF DEFENSE: CHOICE WITHOUT MARKETS.
Personal Author(s):
Hoffman, Fred S
Report Date:
19 Dec 1958
Media Count:
18 Page(s)
Report Number(s):
P-1582
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0654296

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/654296.pdf

Size: 432 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD654296>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SIMULATION AND STIMULATION

Personal Author(s):

Bellman, Richard

Report Date:

17 Dec 1958

Media Count:

15 Page(s)

Report Number(s):

RAND/P-1581

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The paper is devoted to an analysis of the qualities required for the successful construction of mathematical models of economic, psychological, and military processes, and to a discussion of why the universities have almost completely failed in the job of turning out people possessing these qualities.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0215771

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BIBLIOGRAPHY OF LITERATURE ON OPTIMUM DESIGN OF STRUCTURES AND RELATED TOPICS

Descriptive Note:

Research memo.,

Personal Author(s):

MICKS, W R

Report Date:

15 Dec 1958

Media Count:

43 Page(s)

Report Number(s):

RM-2304

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607675

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLITICAL CONTROL IN THE EAST GERMAN PEOPLE'S ARMY.

Report Date:

15 Dec 1958

Media Count:

12 Page(s)

Report Number(s):

T-108

TT-64 71626

Monitor Series:

64 71626

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The political controls imposed on a Soviet satellite army are discussed. The article is of interest not only for the detail of information it offers but also because the East German 'National People's Army' at the moment is undoubtedly being readied for a role it may potentially play in the deepening German crisis. The elaborate network of controls and means of supervision is described in an armed force where suspicion and distrust rather than esprit de corps seem to be the outstanding morale factors.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0226128

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MILITARY RESEARCH AND DEVELOPMENT POLICIES

Personal Author(s):

KLEIN, B H

MECKLING, W H

MESTHENE, E G

Report Date:

04 Dec 1958

Media Count:

27 Page(s)

Report Number(s):

R-333

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0423473

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE ROLE OF CLEAR SKY TURBIDITY IN ATMOSPHERIC INFRARED TRANSMISSION,

Personal Author(s):

Deirmendjian, Diran

Report Date:

03 Dec 1958

Media Count:

36 Page(s)

Report Number(s):

P1565

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion is presented of the effect of natural haze (aerosol particles) on the transmission of infrared in the water vapor windows. The continuous absorption spectrum of liquid water is examined and it is shown that the absorption coefficient is unimportant as far as the scattering cross section of water droplets is concerned for infrared of wavelengths less than 2.5 microns. The extinction spectra, computed on the basis of water haze having a continuous drop size distribution, agree rather well with atmospheric measurements both in the horizontal and the vertical direction. The size distribution models are consistent with those which explain the atmospheric transmission and scattering of visible sunlight. It is recommended that the currently used standard atmospheres be modified to include a standard aerosol component with vertical stratification to represent this permanent feature of the real atmosphere. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607595

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE STATUS AND IMPROVEMENT OF PHYSICAL CONSTANTS NEEDED FOR PRECISION TRAJECTORIES,

Personal Author(s):

Herrick, Samuel

Report Date:

01 Dec 1958

Media Count:

12 Page(s)

Report Number(s):

P-1559

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A review is given of various physical constants which are used to determine intercontinental trajectories. Recommendations are given for improving the precision of these constants.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0663389

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET PERIODICAL LITERATURE ON ASTRONAUTICS,

Personal Author(s):

Krieger,F J

Report Date:

01 Dec 1958

Media Count:

15 Page(s)

Report Number(s):

P-1562

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The report describes sources of Russian literature on astronautics, and notes the inadequacies of some of the sources.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0206551

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SELECTED BIBLIOGRAPHY ON ECONOMIC DEVELOPMENT AND FOREIGN AID

Personal Author(s):

HALD,MARJORIE

Report Date:

26 Nov 1958

Media Count:

96 Page(s)

Report Number(s):

RM-2096-1

Contract Number:

AF33(038)6413

Report Classification:

Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0605737
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE SYMPOSIUM ON THE USE OF SPACE VEHICLES AT THE FALL 1958 URSI MEETING,
Personal Author(s):
Hoffman, W C
Report Date:
25 Nov 1958
Media Count:
8 Page(s)
Report Number(s):
P-1557
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0400353
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/400353.pdf
Size: 457 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD400353>

Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) DESIGN OF A MANAGEMENT INFORMATION SYSTEM
Personal Author(s):
Stoller, David S
Van Horn, Richard L
Report Date:
22 Nov 1958
Media Count:
15 Page(s)
Report Number(s):
RAND-P-1362
XC-AFRDC
Monitor Series:
AFRDC
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0646720
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) RANDOM VARIATIONS AND SAMPLING MODELS IN PRODUCTION ECONOMICS,
Personal Author(s):
Levine,R A
Rainey,R B
Report Date:
19 Nov 1958
Media Count:
24 Page(s)

Report Number(s):

P-1552

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purposes of the paper are to describe a particular production function in which random phenomena play a major part (the aircraft maintenance process); to describe a simulation model used to predict the outputs of the process; and to discuss, in the light of these, the importance of random factors to the economics of production and the use of simulation models in this field of economics. The major conclusions of the paper are that random phenomena in production economics are more important than has been realized and that the random sampling method may be a useful technique for studying them. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606934

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/606934.pdf

Size: 584 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD606934>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DISENGAGEMENT

Personal Author(s):

Speier, Hans

Report Date:

18 Nov 1958

Media Count:

13 Page(s)

Report Number(s):

RAND-P-1400

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The crisis of Western security has political as well as military aspects. Disengagement is a term now frequently used to designate certain proposals for change in American foreign policy, so that we can overcome the crisis. The current political proposals for disengagement are not - or not yet -- based on the premise that the West is forced to retreat. Instead, they are predicated on certain estimates of present and future Soviet intentions and on the fear of accidental war.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606860

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) FUNCTIONAL EQUATIONS IN THE THEORY OF DYNAMIC PROGRAMMING. X. RESOLVENTS, CHARACTERISTIC FUNCTIONS AND VALUES,

Personal Author(s):

Bellman, Richard

Lehman, Sherman

Report Date:

14 Nov 1958

Media Count:

30 Page(s)

Report Number(s):

P-1332

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422565

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUITABILITY OF SOLID AND LIQUID ROCKET ENGINES FOR PLACING MANNED SATELLITES ON ORBIT,

Personal Author(s):

Goldsmith,M

Report Date:

10 Nov 1958

Media Count:

12 Page(s)

Report Number(s):

P1542

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem of placing large manned satellites on orbit using chemical rockets is examined with attention being paid especially to those factors influencing over-all cost or feasibility. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224042

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ECONOMIC PROSPECTS FOR COMMUNIST CHINA.

Personal Author(s):

Moorsteen, Richard

Report Date:

10 Nov 1958

Media Count:

58 Page(s)

Report Number(s):

P-1298

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607018

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DELICATE BALANCE OF TERROR,

Personal Author(s):

Wohlstetter,Albert

Report Date:

06 Nov 1958

Media Count:

12 Page(s)

Report Number(s):

P-1472

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The assumption that a general thermonuclear war is extremely unlikely is held in common by most of the critics of our defense policy as well as by its proponents. Because of its crucial role in the Western strategy of defense, the stability of the thermonuclear balance which, it is generally supposed, would make aggression irrational or even insane is examined. The balance is believed to be precarious, with critical implications for policy. Deterrence in the 1960's will be neither inevitable nor impossible but the product of sustained intelligent effort, attainable only by continuing hard choice. As a major illustration important both for defense and foreign policy, the particularly stringent conditions for deterrence which affect forces based close to the enemy, whether they are U. S. forces or those of our allies, under single or joint control are discussed. Also considered are the inadequacy as well as the necessity of deterrence, the problem of accidental outbreak of war, and disarmament.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0701803

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETERMINANTAL METHODS IN LATENT CLASS ANALYSIS,

Personal Author(s):

Madansky,Albert

Report Date:

04 Nov 1958

Media Count:

32 Page(s)

Report Number(s):

P-1538

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some extensions of the existing determinantal methods for solving the accounting equations in latent class analysis are presented. These extensions cover more cases than previous methods, give rise to new sufficient conditions for identifiability of the latent class model, and give insight into the

necessity of various sufficient conditions for identifiability. These implications to the identifiability problem are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0651947

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING ALGORITHMS AND FORMULATIONS,

Personal Author(s):

Dreyfus,Stuart E

Report Date:

28 Oct 1958

Media Count:

17 Page(s)

Report Number(s):

P-1527

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Four computational techniques in dynamic programming are given. The areas of applicability of each are indicated, and specific examples are included.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606932

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON 'TECHNOLOGICAL POLICY AND ECONOMIC CALCULATION IN SOVIET INDUSTRY,' BY
DAVID GRANICK,

Personal Author(s):

Moorsteen,Richard H

Report Date:

24 Oct 1958

Media Count:

8 Page(s)

Report Number(s):

P-1397

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Professor Granick has asked 'whether the observed technological decisions (in the Soviet Union) seem similar to those which might have been expected from the workings of economic calculation, provided that such calculation was based on prices appropriate to relative factor scarcities in the economy and to demand schedules reflective of the desires of those exercising effective demand...' He adduces several pieces of evidence, each of which is interpreted as indicating an affirmative answer to the question. The separate pieces of evidence are commented on, taking issue in some ways with the interpretations placed on them, and also on the implications of the opening question itself.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607689

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE PROBABILITY OF AN N-COINCIDENCE,

Personal Author(s):

Livshits,A R

Report Date:

15 Oct 1958

Media Count:

15 Page(s)

Report Number(s):

T-102

TT-59 10795

Monitor Series:

59 10795

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper examines the problem of determining the probability of pulse coincidence in n-pulse random sequences. Formulae are derived which enable one to determine both the probability and average duration of pulse coincidence in sequences containing pulses with equal or unequal pulse widths. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604773

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON AN ATOMIC AIRPLANE,

Personal Author(s):

ARTAMKIN,V

Report Date:

14 Oct 1958

Media Count:

10 Page(s)

Report Number(s):

T-106

TT-64 71267

Monitor Series:

64 71267

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A review of the non-Soviet Literature concerning nuclear powered aircraft design efforts.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0617261

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF POLITICAL ORGANIZATIONS IN INDONESIA,

Personal Author(s):

Pauker,Guy J

Report Date:

13 Oct 1958

Media Count:

26 Page(s)

Report Number(s):

P-1514-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper sketches the role of organized groups in contemporary Indonesia and assesses their likely influence on the direction of political developments in what is termed 'the world's geographically least integrated major state.' It is believed that due to the size of its population, natural resources, and strategic importance, Indonesia is likely to become an area of major importance and a potential trouble-spot.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224126

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) On the Epistemology of the Inexact Sciences.

Report Date:

13 Oct 1958

Media Count:

66 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607688

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RADIATION OF PLASMA IN A MAGNETIC FIELD,

Personal Author(s):

Trubnikov,B A

Report Date:

08 Oct 1958

Media Count:

13 Page(s)

Report Number(s):

T-101

TT-64 71627

Monitor Series:

64 71627

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The radiation of plasma and the associated spiraling of electrons in a uniform magnetic field is examined. The spectrum of radiation of a high speed electron moving in a magnetic field, is made up, as is known of discrete lines - harmonics. Keeping in mind the application to radioastronomy of the sun and the galaxies, consideration is given to the high harmonics of the spectrum.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606297

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING: METHODS AND APPLICATIONS,

Personal Author(s):

Dreyfus,Stuart E

Report Date:

06 Oct 1958

Media Count:

10 Page(s)

Report Number(s):

P-1029

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Dynamic programming is a mathematical technique applicable to multi-stage decision process problems. By observing that 'an optimal policy has the property that whatever the initial state and initial decision are, the remaining decisions must constitute an optimal policy with regard to the state resulting from the first decision' one can represent the process in the form of a functional equation. For finite processes, this equation can be solved recurrently, and one can determine the optimal policy. An interesting and important example of such a process is encountered when one considers the equipment replacement problem. One seeks to determine the optimal time to replace old equipment by new. This process is particularly amenable to dynamic programming, and an optimal policy can be generated under realistic assumptions. The functional equation approach of dynamic programming has also proved useful when applied to a wide variety of problems in the fields of industrial mathematics, logistics, economics, military planning, and pure mathematics and physics. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0627201

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) FEMALE LABOR FORCE PARTICIPATION AND ECONOMIC DEVELOPMENT,

Personal Author(s):

Haber, S

Report Date:

01 Oct 1958

Media Count:

84 Page(s)

Report Number(s):

P-1504

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The study focuses on the relationship between economic development and trends in female labor force participation. The discussion is confined to the United States. The study is divided into four parts. With economic development, longevity has increased - more so for females than for males. As a result,

the share of females and elderly persons in the working-age population has increased. For the periods 1900-1930 and 1930-1950, the relation between changes in the sex-age composition of the working-age population and the rise in the share of females in the labor force is investigated. In section II, factors that may influence the supply of female labor services at a moment of time and over time are surveyed. The variables include (1) the decline in the birth rate and in average family size, (2) the spread of education, (3) urbanization, (4) the reduction in the length of the work week, (5) changes in the legal, political, and social statue of women, (6) the growth in real income, and (7) the reduction in housework. In section III factors influencing the demand for female labor services are examined. The analysis is based on the relation between the job characteristics of various occupations and the characteristics of women as active workers. in section IV a procedure is adopted for testing the relation between the growth of the distribution and service industries and the rise in the share of females in the labor force.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605794

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE QUESTION OF INTERPLANETARY LAW AND FOR EQUAL COLLABORATION IN THE PEACEFUL
USE OF COSMIC SPACE,

Personal Author(s):

Galina,A

Report Date:

25 Sep 1958

Media Count:

8 Page(s)

Report Number(s):

TT-64 71374

Monitor Series:

64 71374

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607066

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ATMOSPHERIC PERTURBATIONS OF ARTIFICIAL SATELLITES,

Personal Author(s):

Leeper,Edward

Report Date:

24 Sep 1958

Media Count:

8 Page(s)

Report Number(s):

P-1496

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A study of the perturbation of artificial satellite orbits by atmospheric drag forces is important in predicting satellite orbits and lifetimes, and can provide a means of obtaining atmospheric data from satellite observations. The purpose of this paper is to present straightforward and accurate methods of computing drag perturbations, with corrections for influencing factors such as the rotation of the earth.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606998

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND NEUTRON TRANSPORT THEORY. IV. GENERALIZED TRANSPORT THEORY,

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Wing, G Milton

Report Date:

24 Sep 1958

Media Count:

1 Page(s)

Report Number(s):

P-1495

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The aim of the paper is to extend previous results and techniques so as to include an extensive category of transport processes involving deterministic and stochastic interactions and general geometries. Characteristic functions and probabilities as well as expected values (fluxes) are determined. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607027

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL EQUATIONS AND MAXIMUM RANGE,

Personal Author(s):

Bellman, Richard

Report Date:

24 Sep 1958

Media Count:

8 Page(s)

Report Number(s):

P-1494

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The current interest in rockets and space travel has aroused a corresponding interest in the determination of maximum range, minimum time, and so on, for various types of trajectories. A variety of questions of this type have been treated by means of the theory of dynamic programming. Here it is shown how to use functional equations to determine the range, the maximum elevation, and similar quantities, as functions of initial position and velocities. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224124

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TOWARD A NEW WEAPON SYSTEM ANALYSIS.

Personal Author(s):

Berman, Edward B

Report Date:

23 Sep 1958

Media Count:

14 Page(s)

Report Number(s):

P-1493

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606465

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/606465.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD606465>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A MULTIMOVE INFINITE GAME WITH LINEAR PAYOFF

Personal Author(s):

Berkovitz, Leonard D

Dresher, Melvin

Report Date:

22 Sep 1958

Media Count:

53 Page(s)

Report Number(s):

P-1151

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This paper analyzes a multimove infinite game with linear payoff function. The game had its origin in the consideration of a military problem, but is presented here solely for its mathematical interest. It is symmetric in every respect except that the initial conditions of the two players are different. On each move, each player allocates his resources to tasks that might be described roughly as attacking, defending, and scoring. His resources for the next move are diminished by the amount that his opponent's attack exceeds his own defense, while his score cumulates from move to move. The value of

the game and the optimal strategies for the players are rigorously derived in the present paper. It is shown that one player has a pure optimal strategy and the other player must randomize.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607026

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROSPECTUS FOR A REORIENTATION OF GAME THEORY,

Personal Author(s):

Schelling,T C

Report Date:

17 Sep 1958

Media Count:

76 Page(s)

Report Number(s):

P-1491

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607025

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CROSS-SECTION METHOD, AN ALGORITHM FOR LINEAR PROGRAMMING,

Personal Author(s):

Stone,Jeremy J

Report Date:

16 Sep 1958

Media Count:

8 Page(s)

Report Number(s):

P-1490

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper an algorithm is presented which solves the linear programming problem. This algorithm combines the usual phase one (getting feasibility) and phase two (getting optimality) of the Simplex or Dual methods into a single phase. The algorithm begins with either a single activity (column) or a constraint (equation) and proceeds to add either activities or constraints one at a time, solving the subproblems which arise for their optimal solutions. The final solution is attained after adding the last activity or constraint. The algorithm promises to be an efficient one and has several advantages which arise from the information supplied about subproblems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606205

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME SOVIET VIEWS ON THE NATURE OF A FUTURE WAR AND THE FACTORS DETERMINING ITS COURSE AND OUTCOME: SOVIET MILITARY SCIENCE ON THE CHARACTER OF CONTEMPORARY WAR; ON THE BASIC FACTORS DETERMINING THE COURSE AND OUTCOME OF WAR AND COMMENTS,

Personal Author(s):

BAZ',I S

Korotkov,I

Report Date:

15 Sep 1958

Media Count:

54 Page(s)

Report Number(s):

T-97

TT-64 71445

Monitor Series:

64 71445

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Two articles from the Soviet military press which treat some major problems of Soviet military thought in an usually comprehensive and systematic fashion are presented. The first, entitled 'Soviet Military Science on the Character of Contemporary War,' by Colonel I. S. Baz', was published in the June 1958 (No. 6) issue of Military Herald, the Defense Ministry monthly which deals chiefly with problems of ground force officers. The second, entitled 'On the Basic Factors Determining the Course and Outcome of War,' by Colonel I. Korotkov, was published in the Air Force daily, Soviet Aviation, on August 12, 1958. The Military Herald article draws together and provides a theoretical framework for views on the character of a future war expressed piecemeal by other Soviet authors in the past. The conceptual framework of the discussion is embodied in the context of an attack on the historical indeterminism of Clausewitz's theory of wars.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607068

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SPACE ENVIRONMENT,

Personal Author(s):

Dole,S H

Report Date:

15 Sep 1958

Media Count:

5 Page(s)

Report Number(s):

P-1499

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A brief review is presented of the major aspects of the space environment, including celestial mechanics, meteoritic particles, and radiation problems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607024

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE SIGNIFICANCE OF SOLVING LINEAR PROGRAMMING PROBLEMS WITH SOME INTEGER VARIABLES,

Personal Author(s):

Dantzig, George B

Report Date:

08 Sep 1958

Media Count:

13 Page(s)

Report Number(s):

P-1486

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Recent proposals by Gomory and others for solving linear programs involving integer-valued variables appear sufficiently promising that it is worthwhile to systematically review and classify problems that can be reduced to this class and thereby solved. Historically, non-linear, nonconvex and

combinatorial problems are areas where classical mathematics almost always fails. It is therefore significant that the reduction can be made for problems involving multiple dichotomies and k-fold alternatives which include problems with discrete variables, non-linear separable minimizing functions, conditional constraints, global minimum of general concave functions and combinatorial problems such as the fixed charge problem, traveling salesman problem, orthogonal latin square problems, and map coloring problems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0244705

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DATA PROCESSING CONCEPT FOR AIR FORCE BASES

Personal Author(s):

POSTLEY,J A

POLLACK,S L

Report Date:

05 Sep 1958

Media Count:

63 Page(s)

Report Number(s):

RM-2232

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution unlimited. Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607021

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON THE RELATIONSHIP OF SAVING TO THE RATE OF INTEREST, REAL INCOME, AND
EXPECTED FUTURE PRICES,

Personal Author(s):

Bear,Donald V T

Report Date:

04 Sep 1958

Media Count:

8 Page(s)

Report Number(s):

P-1480

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607023

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GENERAL THEOREM CONCERNING THE STABILITY OF A PARTICULAR NON-NEWTONIAN FLUID,

Personal Author(s):

Genensky,Samuel M

Report Date:

03 Sep 1958

Media Count:

13 Page(s)

Report Number(s):

P-1484

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It was the intention of the present paper to prove a theorem concerning the stability of a particular nonNewtonian fluid suggested to the author by Professor R. S. Rivlin of Brown University. The method used in proving this theorem is similar to that employed by H. Schlichting in his proof of a similar theorem for an inviscid fluid which was originally established by Lord Rayleigh. The acceleration gradients introduced by the non-Newtonian fluid model into the constitutive equations were found to alter the stability criterion set forth by Rayleigh for an inviscid fluid. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0211940

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GOVERNMENT ACQUISITION OF AGRICULTURAL OUTPUT IN MAINLAND CHINA

Descriptive Note:

Research memo.,

Personal Author(s):

HSIA, RONALD

Report Date:

03 Sep 1958

Media Count:

94 Page(s)

Report Number(s):

RM-2207

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607006

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIMULATION IN RAND'S LOGISTICS SYSTEMS LABORATORY, LABORATORY PROBLEM 1,

Personal Author(s):

Haythorn,W W

Report Date:

03 Sep 1958

Media Count:

9 Page(s)

Report Number(s):

P-1456

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607003

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COSTS AND OUTPUTS,

Personal Author(s):

Alchian,Armen

Report Date:

03 Sep 1958

Media Count:

12 Page(s)

Report Number(s):

P-1449

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Obscurities, ambiguities and errors exist in cost and supply analysis despite, or because of, the immense literature on the subject. Especially obscure are the relationships between cost and output both in the long run and in the short run. Propositions designed to eliminate some of these ambiguities and errors are presented in this paper. More important, these suggested propositions seem to be empirically valid. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607020

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MATHEMATICAL STUDY OF ARBITRAGE,

Personal Author(s):

Stone,Jeremy J

Wagner,Harvey M

Report Date:

02 Sep 1958

Media Count:

13 Page(s)

Report Number(s):

P-1478

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper is a systematic study of the mathematical structure underlying nearly perfect exchange markets which are spatially or temporally separated. The principal questions investigated are 'what are equilibrium conditions for a set of exchange rates' and 'How can arbitrage possibilities be discovered, if they exist.' The analysis involves the combined use of an algebraic representation, which is conducive to the derivation of qualitative features characterizing a multi-exchange market; and two linear programming models, one of which has use in establishing a desirable set of equilibrium exchange rates, and the other of which has a special form permitting an efficient computational scheme for discovering arbitrage possibilities. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607017

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND WAVE PROPAGATION IN STOCHASTIC MEDIA,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Report Date:

29 Aug 1958

Media Count:

9 Page(s)

Report Number(s):

P-1471

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The principle of invariant imbedding leads to the formulation of various functional equations describing plane wave propagation in stochastic media. The approach involves first the derivation of stochastic functional equations for reflection and transmission coefficients, followed by the taking of expected values of appropriate functions of the random state variables. This makes possible the

determination of their characteristic functions and distribution functions, by means of still other functional equations, or by computational schemes of the Monte Carlo type. The particular example in which a plane wave is incident on a stratified slab which is characterized by stochastic wave numbers in each stratum is discussed. The distribution functions for the amplitude of the random reflected and transmitted waves are then determined as functions of the thickness of the slab. The effects of multiple scattering are taken into account.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607022

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE POSSIBILITY OF AN ENERGY GAP IN THE SPECTRUM OF A DEGENERATE FERMI LIQUID,

Personal Author(s):

Ferrell, Richard A

Report Date:

29 Aug 1958

Media Count:

12 Page(s)

Report Number(s):

P-1482

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is proved on the basis of Galilean invariance that a degenerate liquid of identical interacting Fermions possesses excited states corresponding to arbitrarily small energies of excitation. Thus there is no energy gap in the spectrum of infinite nuclear matter and there is an essential difference between nuclear matter and the electron gas in a superconductor. In the latter the lattice provides a preferred frame of reference so a gap in the energy spectrum is not ruled out by considerations based on Galilean invariance. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607019

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/607019.pdf

Size: 652 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD607019>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE DISTRIBUTION OF RADIAL ERROR AND ITS STATISTICAL APPLICATION IN WAR GAMING

Personal Author(s):

Edmundson, H P

Report Date:

29 Aug 1958

Media Count:

29 Page(s)

Report Number(s):

RAND-P-1473

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The report presents a unified treatment of the assumptions and theorems concerning the distribution of radial error, and demonstrates its statistical application in war gaming. The density function and cumulative distribution function of the radial error are derived and graphed for one, two, and three dimensions. For each of these cases, formulas are given for the expectation, standard deviation, and median of the radial error. Tables of pertinent conversion are provided. Results are given

for the distribution of detonation points in three dimensions that are useful in war games employing atomic rockets or torpedoes.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0701792

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE GOODNESS-OF-FIT STATISTICS OF KOLMOGOROV AND SMIRNOV,

Personal Author(s):

Edmundson,H P

Report Date:

29 Aug 1958

Media Count:

22 Page(s)

Report Number(s):

P-1474

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

PORTIONS OF THIS DOCUMENT ARE NOT FULLY LEGIBLE.

Abstract:

(U) A. Kolmogorov and N. Smirnov have proposed several new statistics for testing goodness of fit. To encourage their wider use, this memorandum summarizes their theory and applications, and compares them with the classical chi square statistic for testing goodness of fit. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607016

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ASYMPTOTIC BEHAVIOR OF SOLUTIONS OF DIFFERENTIAL-DIFFERENCE EQUATIONS,

Personal Author(s):

Bellman, Richard

Cooke, Kenneth L

Report Date:

28 Aug 1958

Media Count:

76 Page(s)

Report Number(s):

P-1470

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper, the problem was considered of determining the asymptotic behavior of solutions of linear differential-difference equations whose coefficients possess asymptotic series. Although the problem is considerably more complicated than the corresponding problem for ordinary differential equations, by means of a sequence of transformations the problem was reduced to a form where the standard techniques of ordinary differential equation theory could be employed. The differential-difference equation was transformed into an integral equation which was transformed into an integro-differential equation. At this point the Liouville transformation plays a vital role. Although the guiding ideas were simple, the analysis became formidable. For this reason, only some of the more immediate aspects of the problem were considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0230074

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) HEAT TRANSFER IN A DISSOCIATING GAS

Personal Author(s):

GREIFINGER, PHYLLIS

Report Date:

28 Aug 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607015

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MILITARY THOUGHT AND POLITICS IN THE U.S.S.R.

Personal Author(s):

Rush, Myron

Report Date:

26 Aug 1958

Media Count:

9 Page(s)

Report Number(s):

P-1469

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) What is Soviet thinking on the fantastic new weapons. In any future war, what would be their mission. How are they expected to contribute to victory. More generally, what is Soviet military doctrine (the principles governing the employment of military forces in combat) and Soviet military strategy (plans for achieving specific objectives) in the nuclear age. These are the questions posed by Dr. Garthoff, and in quest of the answers he has examined Soviet military organization, force structure, and military posture to determine their bearing on Soviet doctrine and strategy.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605769

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MOLLIER ENTHALPY-ENTROPY CHARTS FOR HIGHTEMPERATURE PLASMAS,

Personal Author(s):

Bosnjakovic,F

Springe,W

Knoche,K F

Burgholte,P

Report Date:

25 Aug 1958

Media Count:

8 Page(s)

Report Number(s):

T-96

TT-64 71349

Monitor Series:

64 71349

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Energy changes and heat transfer in high-temperature gaseous plasma flows are becoming increasingly important in technology. Mollier enthalpy-entropy diagrams have proved to be valuable

tools in this development. Enthalpy-entropy diagrams for hydrogen and argon plasmas at temperatures up to 100,000K and for pressures from 0.01 to 100 atm are presented. The diagrams are shown with lines of constant pressure, density, temperature, and sonic velocity. These graphs are further plotted in logarithmic co-ordinates in order to present the low-temperature region more clearly. The diagrams are only valid for plasmas existing in thin layers where the energy and entropy content of the enclosed radiation is not important. Radiation must be taken into account for plasma layers of large thickness. As an example of the application of these charts, the stagnation temperature of a body flying at 8,000 meters/sec in a hydrogen or argon atmosphere at 0.01 atm pressure and 300K temperature is calculated. For the case of a hydrogen atmosphere, the wall temperature at the stagnation point $T_{sub\ w} = 2000K$ (wall radiation neglected) and $T_{sub\ w} = 1820K$ (with wall radiation). In argon, these values are 16,500K without and 5800K with wall radiation. The great importance of both the medium and the wall radiation is apparent. In these calculations it is assumed that no magnetic field exists. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607014

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PARAMETER ESTIMATION FOR WAVEFORMS IN ADDITIVE GAUSSIAN NOISE,

Personal Author(s):

Swerling,P

Report Date:

25 Aug 1958

Media Count:

9 Page(s)

Report Number(s):

P-1468

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method is developed for computing the greatest lower bound for the variance of unbiased estimates of waveform parameters, when the waveform is observed in additive Gaussian noise. The

greatest lower bound is approximately evaluated in several illustrative cases. The waveform parameters occurring in these examples are amplitude, time delay, and doppler shift. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607013

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REVIEW OF ENERGY FORECASTS IN WESTERN EUROPE,

Personal Author(s):

Lubell,Harold

Report Date:

21 Aug 1958

Media Count:

5 Page(s)

Report Number(s):

P-1466

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Europe's growing fuel deficit is largely responsible for the existence of two of the international organizations which have been created in Little Europe in recent years: the European Coal and Steel Community (ECSC) and Euratom. It is also the cause for an increasing amount of concern on the part of Western Europe's elder international agency, the Organization for European Economic Cooperation(OEEC), and the European regional organization of the United Nations, the Economic Commission for Europe (ECE). Of these, the ECSC, Euratom, and the OEEC have published reports on the energy problem of that part of Europe within its own province; the ECE has an energy study for all of Europe in the works. All of them are concerned with projecting energy requirements and regional deficits two decades into the future -- to 1957.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606627

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMMAND STRUCTURE FOR COMPLEX INFORMATION PROCESSING,

Personal Author(s):

Shaw,J C

Newell,A

Simon,H A

Ellis,T O

Report Date:

20 Aug 1958

Media Count:

62 Page(s)

Report Number(s):

P-1277

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Recent research into digital computer programs for discovering proofs to theorems in symbolic logic and playing chess has shown the desirability of languages better adapted to the requirements of such non-numeric programming tasks than are present day machine languages. A command structure which allows more indirectness in programming and requires less knowledge of the location and form of the data is described. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607012

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPLICATION OF DYNAMIC PROGRAMMING TO THE DETERMINATION OF OPTIMAL SATELLITE TRAJECTORIES,

Personal Author(s):

Bellman, Richard

Dreyfus, Stuart

Report Date:

19 Aug 1958

Media Count:

1 Page(s)

Report Number(s):

P-1463

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Consideration is given to a simplified satellite trajectory problem, corresponding to a flat earth assumption, first treated by Okhotsimskii and Eneev. A numerical solution is presented based upon the functional equation technique of dynamic programming. A proof of the fundamental result in the analytic solution is given. The same computational approach can be applied to more realistic trajectory problems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607010

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REVIEW OF: OEEC, OIL: THE OUTLOOK FOR EUROPE; OEEC, EUROPE'S NEED FOR OIL: IMPLICATIONS AND LESSONS OF THE SUEZ CRISIS,

Personal Author(s):

Lubell, Harold

Report Date:

15 Aug 1958

Media Count:

4 Page(s)

Report Number(s):

P-1461

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The last two reports of the OEEC's Oil Committee constitute the best available summary of Western Europe's views on its situation with respect to oil. Straddling the Suez crisis, they provide a good mirror of Europe's growing awareness of the extent of its stake in Middle East oil. 'Oil: The Outlook for Europe' was published after the Egyptian nationalization of the Suez Canal, but before the Anglo-French-Israeli attack on Egypt and the subsequent closing of the Canal. Primarily intended to add the details on petroleum to the broader report on 'Europe's Growing Needs of Energy' published a few months earlier by the OEEC's Energy Commission, the report of the Oil Committee gives only slight hints of the threat of disruption of the flow of Europe's supplies of oil from the Middle East.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607011

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMICS OF DEFENSE PROCUREMENT AND SMALL BUSINESS,

Personal Author(s):

Novick, David

Springer, J Y

Report Date:

15 Aug 1958

Media Count:

12 Page(s)

Report Number(s):

P-1462

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper examines the magnitude and nature of military procurement and the special commercial considerations involved. The analysis concentrates on specialized military equipment and gives only passing attention to the problems of doing business with the military in such commodities as shoes, clothing, typewriters, meat and vegetable products, and a multitude of other items that the services buy that are similar to or identical with standard articles of commerce. The main concern of this study, therefore, is centered on the economics of procurement of weapons and the related and specialized equipment essential to their operation. Of necessity it includes components, materials, special products, and services required for weapons and their directly related equipment.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607008

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A RATIONAL ECONOMIC MODEL APPROACH TO THE BIRTH RATE,

Personal Author(s):

Okun,Bernard

Report Date:

12 Aug 1958

Media Count:

13 Page(s)

Report Number(s):

P-1458

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper focuses attention on an economic explanation of the birth rate. Although abstracting from many social, psychological and economic hypotheses which have been adduced as explanations of birth rate trends, there is no intention to convey the idea that only the factors which it considers in the analysis are of significance. It is well known that in the developed countries, the secular trend in the birth rate has been downward during the past 100 years. This has occurred in the face of rising average family income. In this paper an economic model is proposed which suggests that the rise in family income contributed to the decline in family size.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607009

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLVING TWO-MOVE GAMES WITH PERFECT INFORMATION,

Personal Author(s):

Dantzig, George B

Report Date:

11 Aug 1958

Media Count:

5 Page(s)

Report Number(s):

P-1459

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A two-move game with perfect information was considered, such as a move and counter-move situation between two firms or economies. This led to the problem of finding a global minimum of a concave function over a convex domain and the distressing possibility of local minima at every extreme point. It was shown however that the global minimum could be obtained by solving a linear programming system with side conditions that at least one of certain pairs of variables vanish. The latter

problem can be shown to be equivalent to solving a linear programming problem with some integer valued variables. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607007

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNICATIONS ANALYSIS IN LP-I (THE LOGISTIC SYSTEMS LABORATORY'S PROJECT-I),

Personal Author(s):

Beverly,R S

Report Date:

11 Aug 1958

Media Count:

12 Page(s)

Report Number(s):

P-1457

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606941

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BROKEN GEMS AND WHOLE TILES: A REVIEW ARTICLE,

Personal Author(s):

Halpern,A M

Report Date:

08 Aug 1958

Media Count:

12 Page(s)

Report Number(s):

P-1419 REV.

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The two books under review here exemplify, each in its own way, the prosperous state that Japanology has attained in this country. Maxon adds his name to the already respectably long list of American students whose grasp of sources is both broad and deep, who have worked directly with Japanese individuals and institutions as well as contemplated them, and who furthermore have a point to make. Maxon's book is a closely documented monograph. The revised edition of Reischauer's book contains some changes and a new section covering postwar trends. Reischauer in this book is not so much the monographist as the practitioner of humane letters, whose grasp of the facts is so sure and comprehensive that he can proceed to consider their meaning without pausing for exhaustive description. Both men exhibit the historian's bent. Since the reviewer is predisposed to a sociological approach, the questions asked of the books refer to the explanatory concepts used by the authors and to how much these concepts explain or leave unexplained.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607004

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ISOBARS AND ANTIPODES,

Personal Author(s):

Youngs,J W T

Report Date:

05 Aug 1958

Media Count:

5 Page(s)

Report Number(s):

P-1451

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) On any typical weather map of the world some isobars are small in size while others appear quite extensive. Around a low or a high pressure area the isobars usually appear as small closed curves, while between low and high pressure areas some isobars appear to be very long. This paper shows that some isobars must be long enough to contain an antipodal pair of points. The proof is deceptively short and simple, a condition brought about by the use of some of the most powerful tools in topology. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224061

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET STATE PLANNING AND FORCED INDUSTRIALIZATION AS A MODEL FOR ASIA,

Personal Author(s):

Hoeffding, Oleg

Report Date:

04 Aug 1958

Media Count:

30 Page(s)

Report Number(s):

P-1450

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0636038

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/636038.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD636038>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THEORY AND APPLICATION OF THE NOTION OF COMPLEX SIGNAL

Personal Author(s):

Ville, J

Report Date:

01 Aug 1958

Media Count:

36 Page(s)

Report Number(s):

RAND-T-92

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The present article is a contribution to the problem of the composite representation of a signal by a two-dimensional distribution of energy in a domain defined by two axes, the time axis and the frequency axis. The author proposes such a distribution, using operators analogous to those used in quantum mechanics. He thus obtains a definition of the instantaneous spectrum of a signal, and of the

distribution of the energy corresponding to one frequency. By integration (with respect to time) of the instantaneous spectrum (which varies with time) the spectrum, in the usual sense of the word, is recovered. The author defines the instantaneous frequency of a signal in the same way, using the notion of a complex signal (obtained by the complex extension of the real signal when time is considered as a complex variable). These notions of instantaneous frequency and of the instantaneous spectrum are introduced to furnish a firm theoretical basis for studies of frequency modulation, of continuous harmonic analysis, of frequency compression, and, in a general way, of all the problems for which classical harmonic analysis furnishes a description which departs too far from physical reality. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607002

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EQUIVALENT LINEAR PROGRAMMING PROBLEM,

Personal Author(s):

Dantzig, George B

Johnson, Selmer M

Report Date:

01 Aug 1958

Media Count:

8 Page(s)

Report Number(s):

P-1448

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An equivalent formulation for a standard linear programming problem was developed. For the case where the number of variables is twice the number of equations m , the equivalent problem has the same size but has the inverses of the first and second m columns of the matrix of coefficients. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607005

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INDONESIAN IMAGES OF THEIR NATIONAL SELF,

Personal Author(s):

Pauker, Guy J

Report Date:

01 Aug 1958

Media Count:

9 Page(s)

Report Number(s):

P-1452-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The report discusses the Indonesian self-image as reflected by the various responses of the Indonesian people to the following question: 'What is our goal and our mission in this world, taking into account our specific characteristics, our history, the culture of our people and also our vision of the future.'

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606918

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GENERAL CHARACTERISTICS OF BINARY BOUNDARY LAYERS WITH APPLICATIONS TO SUBLIMATION COOLING,

Personal Author(s):

Gross,Joseph F

Masson,David J

Gazley,Carl,Jr

Report Date:

01 Aug 1958

Media Count:

64 Page(s)

Report Number(s):

P-1371

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606940

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BOUNDS OF THE EXPECTATION OF A CONVEX FUNCTION OF A MULTIVARIATE RANDOM VARIABLE,

Personal Author(s):

Madansky,Albert

Report Date:

30 Jul 1958

Media Count:

12 Page(s)

Report Number(s):

P-1418

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Upper and lower bounds on the expectation of a convex function of a vector valued random variable are derived by examining the boundary of an appropriate multivariate moment space.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606947

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REVIEW OF OEEC, SOME ASPECTS OF THE EUROPEAN ENERGY PROBLEM AND OEEC, EUROPE'S GROWING NEEDS OF ENERGY: HOW CAN THEY BE MET,

Personal Author(s):

Lubell, Harold

Report Date:

28 Jul 1958

Media Count:

4 Page(s)

Report Number(s):

P-1445

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The basic contributions of the Organization for European Economic Cooperation to the discussions of Western Europe's growing shortage of energy resources that preceded the birth of Euratom are contained in two documents. The earlier, Some Aspects of the European Energy Problem, was written in 1955 by Louis Armand, one of the 'Three Wise Men' who later outlined a set of goals for a future European nuclear energy community. At Armand's suggestion, his brief survey was followed up by a more extensive study of Europe's situation, Europe's Growing Needs of Energy: How Can They Be Met, written in 1956 by a group of experts which included Francesco Giordani, another of the 'Three Wise Men', and eight other of the leading experts of Continental Europe, the U. K., and the U. S. A. in the field of energy production and distribution.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606946

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A TABLE FOR OBTAINING TRIAL VALUES FOR ESTIMATING RELATIONSHIPS IN WHICH THE
DEPENDENT VARIABLE IS LIMITED,

Personal Author(s):

Rosett, Richard N

Report Date:

24 Jul 1958

Media Count:

4 Page(s)

Report Number(s):

P-1444

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In estimating relationships such as that described by J. Tobin in Econometrica (January 1958) it is necessary to approximate linearly the function. This table is based on the assumption that within the relevant (for a particular problem) range of this function, the number of times the function will be approximated is normally distributed around a known mean. The table is used as follows: Q is the ratio of Limit observations in the sample to all observations in the sample. The line $Y = A+Bx$ is then used to approximate for any x, where A and B are read from the table. These are the A and B mentioned by Tobin in his section on obtaining trial values. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0608966

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/608966.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD608966>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME ASPECTS OF ASTRONAUTICS

Personal Author(s):

Buchheim, R W

Herrick, S

Vestine, E H

Wilson, A G

Report Date:

23 Jul 1958

Media Count:

50 Page(s)

Report Number(s):

P-1442

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The aspects of celestial mechanics and their influence on space navigation are considered. The total action of forces and relative motions and distances as they affect an object traveling in space are discussed. The main categories of space flight covered are earth satellites, lunar flights, and interplanetary flights.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606944

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A LIOUVILLE TRANSFORMATION FOR $U \text{ SUB } XX + U \text{ SUB } YY = A(2) (X,Y)U = 0,$

Personal Author(s):

Bellman, Richard

Report Date:

22 Jul 1958

Media Count:

8 Page(s)

Report Number(s):

P-1440

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0627205

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RUSSIA'S NEW MIDDLE CLASS,

Personal Author(s):

Edeen, Alf

Report Date:

16 Jul 1958

Media Count:

19 Page(s)

Report Number(s):

T-91

TT-66-60386

Monitor Series:

66-60386

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An analysis is given of the social class composition of various Communist Party congresses, and some of the ways that the Soviet Union favors its new middle class are described. For instance, the progressive principle in income taxation stops at 1000 rubles per month, checking accounts earn interest at 3 per cent, and inheritance taxes are very light. The chapter headings are: The party cadres; party elite; nationality question; role of women in the party; and position of the intelligentsia in Soviet society.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604808

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROLOGUE TO A SYNTAX OF SPACE EXPLORATION,

Personal Author(s):

WILSON,A G

Report Date:

15 Jul 1958

Media Count:

12 Page(s)

Report Number(s):

P-1425

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A paper concerning the problem of arriving at a unified scientifically responsible program, or syntax, for space exploration.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606914

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/606914.pdf

Size: 713 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD606914>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AGGREGATION OF UTILITY FUNCTIONS

Personal Author(s):

Eisenberg, Edmund

Report Date:

14 Jul 1958

Media Count:

31 Page(s)

Report Number(s):

RAND-P-1363

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The author shows that if in an economy each consumer has a fixed income and acts so as to maximize a concave, continuous and homogeneous utility function, then both a social welfare and a community utility function exist.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0656682

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/656682.pdf

Size: 358 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOLVING LINEAR PROGRAMS IN INTEGERS

Descriptive Note:

Revised edition

Personal Author(s):

Dantzig, George B

Report Date:

11 Jul 1958

Media Count:

7 Page(s)

Report Number(s):

P-1359

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

20 - JOURNAL ARTICLES; DTIC USERS ONLY

Distribution Statement:

Approved for public release; distribution is unlimited. Available only to DTIC users. U.S. Government or Federal Purpose Rights License.

Abstract:

(U) A recent result of Gomory (Princeton) settled an outstanding problem, namely that of solving linear programs in integers. Gomory showed how to add linear inequality constraints to a linear programming problem automatically in such a way that the extreme points of the resulting convex contain only integral solutions in the neighborhood of the minimum. In the present research memorandum, an alternative method is given for generating additional constraints in a way easy to justify and to apply. However, it is not known whether these conditions will lead to a solution in a finite number of iterations as is true for the stronger Gomory conditions. Anyone considering their practical use should therefore weigh the ease of generation against the extra number of iterations required for convergence.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606933

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON WILES' 'RATIONALITY, THE MARKET, DECENTRALIZATION AND THE TERRITORIAL PRINCIPLE,'

Personal Author(s):

Kaplan, Norman M

Report Date:

07 Jul 1958

Media Count:

12 Page(s)

Report Number(s):

P-1398

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Wiles paper has two main parts: a theoretical part on rationality and resource allocation, and a slightly more factual part on the recent reorganization of the Soviet economy. The nexus between them appears to be negative; the point seems to be that the reorganization does not represent the kind of reform which economic rationality would suggest. In any case, the remarks of this review are confined to the theory of resource allocation under 'socialism' in part because the reorganization of the Soviet economy is covered in the remarks of others.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0490833

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/490833.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD490833>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MATERIALS FOR SPACE FLIGHT

Personal Author(s):

Hoffman, George A

Report Date:

01 Jul 1958

Media Count:

29 Page(s)

Report Number(s):

RAND-P-1420

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This lecture discusses the spectrum of thermal environments and functional requirements for materials used in space vehicles. Two major criteria emerge: (1) a desire by designers to operate materials at the highest permissible temperature and (2) the necessity to minimize the structural weight. Future possibilities in materials are investigated in these categories: For maximum temperatures the metals, carbon, and carbides are studied; for minimum weight requirements, fibered materials for tension elements) and beryllium (for buckling components) are discussed. Improvements in performance of space flight vehicles are listed, as afforded by the advanced materials studied. Topics for research in each material area are offered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605750

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UNIFIED DYNAMICS AND THERMODYNAMICS OF A THERMAL PLASMA.

Personal Author(s):

Maecker,H

Peters,Th

Report Date:

26 Jun 1958

Media Count:

8 Page(s)

Report Number(s):

T-90

TT-64 71351

Monitor Series:

64 71351

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A. Schluter and others have proposed a theory of plasma dynamics based on hydrodynamic principles in which the thermodynamics of the plasma are not considered. Therefore, this unified theory for the dynamics and thermodynamics of the plasma is presented using the principles of irreversible thermodynamics. Essentially, three flow equations result. The current and ambi-polar flow equations agree with Schluter's equations except for the additional thermal forces. The third is the general energy flow equation which refers the energy flow to the center-of-mass flow, the current and ambi-polar flow and finally to thermal conduction (without flow). (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224054

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TOP MANAGEMENT DECISION AND SIMULATION PROCESSES.

Personal Author(s):

Bellman, Richard

Report Date:

26 Jun 1958

Media Count:

23 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0260058

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LUNAR INSTRUMENT CARRIER. TRAJECTORY STUDIES

Personal Author(s):

LIESKE,H A

Report Date:

25 Jun 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Results are presented of a study of free-flight earth-moon trajectories, which describe the two-dimensional ballistic motion of a vehicle from a standard initial altitude above the earth to impact on the surface of the moon. Trajectories originating at various positions relative to the initial position of the moon are studied to cover the complete spectrum, including retrograde launching. A design transit trajectory is chosen to examine the effect of small variations of initial parameters on the location of the lunar impact point for use in error studies. A hit band of transit trajectories that lead to impact on the moon is computed by varying initial conditions in the vicinity of the design point. Transit trajectories in the vicinity of the design point that miss the moon are studied for use in establishing artificial satellites of the moon. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606937

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND NEUTRON TRANSPORT THEORY. III. NEUTRON-NEUTRON COLLISION PROCESSES,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Wing,G Milton

Report Date:

20 Jun 1958

Media Count:

8 Page(s)

Report Number(s):

P-1408

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The effects on criticality of neutron-neutron collisions involving annihilation are investigated for one-dimensional, single and multi-group cases. The analytic treatment shows that regardless of the magnitude of the cross section for collision between moving neutrons, there is no critical length (mass). The analogy between this situation and that in hydrodynamics, where the addition of an arbitrarily small viscosity term eliminates the discontinuous shock phenomenon, is indicated. As in earlier papers, the underlying equations are derived using the principle of invariant imbedding. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604807

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604807.pdf

Size: 522 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604807>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EXPERIMENTS IN INTERPLANETARY BIOMIGRATION AND SPACE CONTAMINATION

Personal Author(s):

Cooper, I

Wilson, A G

Report Date:

16 Jun 1958

Media Count:

13 Page(s)

Report Number(s):

P-1406

XJ-NSF

Monitor Series:

NSF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The likelihood of auto-and-ancillary migration of viable micro-organisms is discussed. Experiments are suggested to determine the survival potentials of microorganisms under various space conditions, to establish the extent to which space sterilization of interplanetary instrument probes and other space vehicles may be relied upon to prevent the infecting of other celestial bodies, (or the infecting of the earth with alien life by returning probes), and to determine whether further sterilization procedures would be required.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606936

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE RANK OF A CERTAIN SET OF EQUATIONS,

Personal Author(s):

Gale,David

Report Date:

13 Jun 1958

Media Count:

8 Page(s)

Report Number(s):

P-1404

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) There is a certain well-known set of $6n^2$ linear equations in n^4 unknowns whose nonnegative integral solutions are in one-to-one correspondence with pairs of orthogonal n -th order Latin squares. It is shown that the rank of this system is $6n^2 - 8n + 3$. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604813

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SATELLITE WEATHER RECONNAISSANCE,

Personal Author(s):

Greenfield,S M

Kellogg,W W

Report Date:

12 Jun 1958

Media Count:

22 Page(s)

Report Number(s):

P-1402

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Various aspects of weather reconnaissance by satellites including limitations, capabilities relative to present methods, and growth potential are discussed. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606935

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INCREASING THE CAPACITY OF A NETWORK: THE PARAMETRIC BUDGET PROBLEM,

Personal Author(s):

Fulkerson,D R

Report Date:

12 Jun 1958

Media Count:

8 Page(s)

Report Number(s):

P-1401

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem considered in this paper is that of allocating a budget of resources among the links of a network for the purpose of increasing its flow capacity relative to given sources and sinks. On the assumption that the cost of increasing each link capacity is linear, a labeling algorithm is described that permits rapid calculation of optimal allocations for all budgets.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606945

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PISTON THEORY APPLIED TO STRONG SHOCKS AND UNSTEADY FLOW,

Personal Author(s):

Raymond,J L

Report Date:

05 Jun 1958

Media Count:

12 Page(s)

Report Number(s):

P-1395

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606931

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOLUTIONS OF A SYMMETRIC MARKET GAME,

Personal Author(s):

Shapley,L S

Report Date:

05 Jun 1958

Media Count:

1 Page(s)

Report Number(s):

P-1392

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Solutions are obtained to a symmetrical market game in which the value of a coalition is assumed to be proportional to the number of buyers or sellers participating, whichever is smaller.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0213036

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MONTE CARLO MODELS FOR ESTIMATING RELIABILITY: AN EXPLORATORY ANALYSIS

Descriptive Note:

Research memo,

Personal Author(s):

FIRSTMAN, S I

Report Date:

05 Jun 1958

Media Count:

37 Page(s)

Report Number(s):

RM-2149

Contract Number:

AF

33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605118

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETERRENCE IS NOT ENOUGH,

Personal Author(s):

Reinhardt,G C

Report Date:

04 Jun 1958

Media Count:

24 Page(s)

Report Number(s):

P-983

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The value of a policy of deterrence in the nuclear era is discussed. The effectiveness of deterrence is examined by historical analogy as well as by a consideration of presentday political ideologies and their threat to world peace.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224051

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INTRODUCTION TO DYNAMIC PROGRAMMING,

Personal Author(s):

Dreyfus, Stuart E

Report Date:
04 Jun 1958
Media Count:
12 Page(s)
Report Number(s):
P1369
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0606925
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) BOOK REVIEW; BRUCE NETSCHERT, THE FUTURE SUPPLY OF OIL AND GAS,
Personal Author(s):
Lubell, Harold
Report Date:
04 Jun 1958
Media Count:
4 Page(s)
Report Number(s):
P-1382
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) One of the important factors affecting the future of the oil producers of the Middle East is the availability of alternative sources of supply elsewhere. Among these, the United States will continue to rank high for a long time to come, as a variety of estimates have shown. Out of the existing welter of estimates, hypotheses, and assumptions about U. S. reserves and production capacity, Bruce Netschert has distilled a consistent set of domestic supply projections as part of an investigation by Resources for the Future of the energy position of the U. S. through 1975.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606929

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND GENERALIZED TRANSPORT THEORY; A BASIC STOCHASTIC FUNCTIONAL EQUATION,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Wing,G Milton

Report Date:

03 Jun 1958

Media Count:

8 Page(s)

Report Number(s):

P-1390

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The aim of the present paper was to extend previous results and techniques so as to include an extensive category of transport processes involving both deterministic and stochastic interaction, general geometries, and the determination of characteristic functions and probabilities as well as fluxes, which is to say, expected values. Utilizing the principle of invariant imbedding, a basic stochastic functional equation was derived. From this equation appropriately specialized, can be obtained all the relations pertaining to fluxes contained in previous papers, and in addition corresponding relations for characteristic functions.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606927

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RE-INTERPRETATION OF THE SOLUTION CONCEPT FOR 'NON-COOPERATIVE' GAMES,

Personal Author(s):

Schelling, T C

Report Date:

02 Jun 1958

Media Count:

1 Page(s)

Report Number(s):

P-1385

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604811

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET BALLISTIC MISSILE AND SPACE FLIGHT PROGRAM,

Personal Author(s):

Krieger, F J

Report Date:

02 Jun 1958

Media Count:

14 Page(s)

Report Number(s):

P-1388

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606928

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FOR THE ABANDONMENT OF SYMMETRY IN THE THEORY OF COOPERATIVE GAMES,

Personal Author(s):

Schelling,T C

Report Date:

29 May 1958

Media Count:

12 Page(s)

Report Number(s):

P-1386

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The first part of this paper argues that the pure, 'moveless' bargaining game analyzed by Nash, Harsanyi, Luce and Raiffa, and others, may not exist or, if it does, is of a different character from what has been generally supposed; the point of departure for this argument is the operational meaning of agreement, a concept that is almost invariably left undefined. The second part of the paper argues that symmetry in the solution of bargaining games cannot be supported on the notion 'rational expectations'; the point of departure for this argument is the operational identification of irrational expectations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606867

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RECIPROCAL FEAR OF SURPRISE ATTACK,

Personal Author(s):

Schelling,T C

Report Date:

28 May 1958

Media Count:

30 Page(s)

Report Number(s):

P-1342

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605113

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/605113.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD605113>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A CALCULATION OF THE BLAST WAVE FROM A SPHERICAL CHARGE OF TNT

Personal Author(s):

Brode, Harold L

Report Date:

26 May 1958

Media Count:

66 Page(s)

Report Number(s):

RAND-P-975

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The blast wave from the detonation of a spherical charge of TNT is described based on results of a numerical calculation. The equations of motion and the equations of state for TNT and for air are described. The pressures, densities, temperatures and velocities are detailed as functions of time and radius. Space-time relations, and energy and impulse histories are shown. A second shock is seen to originate as an imploding shock following the inward rarefaction into the explosion product gases and a series of subsequent minor shocks are seen to appear in a similar manner, moving out in the negative phase behind the main shock.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604812

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POWER IN SPACE,

Personal Author(s):

Huth,J H

Report Date:
26 May 1958
Media Count:
14 Page(s)
Report Number(s):
P-1389
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0606930
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) NUCLEAR ENERGY IN THE U.S.S.R.,
Personal Author(s):
Karamish,Arnold
Report Date:
23 May 1958
Media Count:
8 Page(s)
Report Number(s):
P-1391
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Soviet Government has not published a 'Smyth Report' or any other official description which even in the most general terms describes their overall atomic energy program. As the Russian sputniks have so dramatically demonstrated, it is Soviet policy to give only the vaguest of details on their scientific projects until they have been brought successfully to fruition. Even so, only a fraction of their achievements are exposed to view. Failures and reversals remain secret. Thus, it is virtually impossible for the world to learn of Soviet scientific and planning errors, and the picture which the western world

receives often seems to reflect an overwhelming Soviet superiority. It is this biased picture which often influences the military planning and strategies of western nations, and with regard to the industrial applications of atomic energy is certain to influence world economic and political policy.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606923

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONSENSUS OF SUBJECTIVE PROBABILITIES: THE PARI-MUTUEL METHOD,

Personal Author(s):

Eisenberg, Edmund

Gale, David

Report Date:

22 May 1958

Media Count:

8 Page(s)

Report Number(s):

P-1379

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Under the pari-mutuel system of betting on horse races the final track's odds are in some sense a consensus of the 'subjective odds' of the individual bettors weighted by the amounts of their bets. The properties which this consensus must possess and prove that there always exists a unique set of odds having the required properties are formulated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606922

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) USE OF MATHEMATICAL MODELS FOR LOGISTICAL PLANNING,

Personal Author(s):

Little,Jack D

Report Date:

19 May 1958

Media Count:

1 Page(s)

Report Number(s):

P-1375

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper gives a definition of machine models and their uses in logistic planning and experimentation. As examples, a general description is given of a man-machine model, and of the Missile Support Model. This description covers such areas as: (1) The purpose of these models. (2) The general procedure used in creating the models. (3) The trouble areas found in this creative period. (4) The results obtained from the running of the models. (5) The trouble areas found in the running of the models. (6) Other possible uses of models, such as a means of training on a managerial level. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606919

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RELATION OF SALARY TO THE SUPPLY OF SCIENTISTS AND ENGINEERS,

Personal Author(s):

DEHaven,James C

Report Date:

16 May 1958

Media Count:

4 Page(s)

Report Number(s):

P-1372-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A model is constructed which demonstrates how the pecuniary and non-pecuniary factors of total income may operate on the margin to determine the numbers of people in different occupations. The net present income values at age 18 for several occupations-building construction workers, chemists, and chemical engineers-are calculated using actual income and cost data to show the relevant pecuniary factors which may influence young people in their choices of careers. The implications for three meanings of 'shortage' are discussed in terms of the numbers of people who may choose scientific occupations. Finally, an estimate is made of the future trend of income for chemical engineers in respect to other occupations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605748

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME SPECIAL SOLUTIONS OF THE BOUNDARY LAYER EQUATIONS FOR A COMPRESSIBLE FLUID,

Personal Author(s):

Dorfman,A Sh

Shvetz,E T

Report Date:

15 May 1958

Media Count:

8 Page(s)

Report Number(s):

T-88

TT-64 71367

Monitor Series:

64 71367

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605749

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME RESULTS TAKEN FROM OBSERVATIONS OF THE FIRST RUSSIAN EARTH SATELLITES,

Personal Author(s):

Paetzold,H K

Report Date:

15 May 1958

Media Count:

8 Page(s)

Report Number(s):

T-89

TT-64 71350

Monitor Series:

64 71350

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The appearance of the first artificial satellites was not significant only as the first step in the direction of eventual rocket or space flight. The main purpose for them insofar as the International Geophysical

Year 1957-1958 was concerned, was for the research of the outermost layers of the earth's atmosphere and the adjacent interplanetary space. The observations of the first satellites, which were made in Germany, permit us to arrive at some conclusions concerning the above goal. A review of the orbit elements shows some agreement concerning the state of the upper atmosphere which may be deduced from some observations of orbit changes as well as of radio signals. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606921

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE APPLICATION OF DYNAMIC PROGRAMMING TO A CLASS OF IMPLICIT VARIATIONAL PROBLEMS,

Personal Author(s):

Bellman, Richard

Richardson, John M

Report Date:

14 May 1958

Media Count:

1 Page(s)

Report Number(s):

P-1374

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606617

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ELECTRONICS ENGINEER'S VIEW OF OPERATIONS RESEARCH,

Personal Author(s):

DIGBY, James F

Report Date:

13 May 1958

Media Count:

12 Page(s)

Report Number(s):

P-1254

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The use of operations research in electronics is explored. The history and techniques of operations research are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0238041

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN IDENTIFICATION SYSTEM FOR USE AS AN AID TO RAID DETECTION AND AIR TRAFFIC CONTROL

Personal Author(s):

SQUIRES, W K

Report Date:

13 May 1958

Media Count:

42 Page(s)

Report Number(s):

RM-2169
Contract Number:
AF 33(038)6413
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0605747
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/605747.pdf
Size: 575 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD605747>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) ON THE QUESTION OF THE PRE-EMPTIVE BLOW
Personal Author(s):
Kurasov, V
Report Date:
12 May 1958
Media Count:
20 Page(s)
Report Number(s):
RAND-T-87
TT-64-71366
XC-USAF
Monitor Series:
USAF
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The Soviet view regarding the unleashing of future wars is presented. The idea that America is planning a surprise attack against the USSR is suggested and criticized as being an aggressive, imperialistic design.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606591

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A TOURNAMENT PROBLEM,

Personal Author(s):

Ford, Lester R , Jr

Johnson, Selmer M

Report Date:

09 May 1958

Media Count:

9 Page(s)

Report Number(s):

P-1215

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An improved solution is presented for the problem of finding the smallest number of direct pairwise comparisons which will always suffice to rank n objects according to some transitive characteristic. In his book, Mathematical Snapshots, Steinhaus discusses the problem of ranking n objects according to some transitive characteristic, by means of successive pairwise comparisons. In this paper, the terminology was adopted of a tennis tournament by n players. The problem may be briefly stated: 'What is the smallest number of matches which will always suffice to rank all n players.'

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606917

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MANUFACTURERS' INVENTORY CYCLES AND MONETARY POLICY,

Personal Author(s):

Eisemann,D M

Report Date:

09 May 1958

Media Count:

4 Page(s)

Report Number(s):

P-1370

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The availability of credit is one of the factors which many businessmen must take into account when planning their inventory policy. When inventories are rising rapidly, firms become increasingly dependent on bank credit, and a change in credit policy may have an important influence on inventory fluctuations. This study attempts to measure the impact monetary policy might have on inventories, and to examine the limitations such a policy might face. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606916

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTERSERVICE SUPPLY MANAGEMENT WITHIN THE DEFENSE DEPARTMENT,

Personal Author(s):

Enke,Stephen

Report Date:

08 May 1958

Media Count:

4 Page(s)

Report Number(s):

P-1366

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Slowly but inexorably in fact as well as on paper, many of the supply activities of the four Services are being integrated within the Department of Defense. Although most of the still unintegrated logistics activities tend to be peculiar in some way to a particular Service, and so should never be centralized, there are still many supply items that are sufficiently common to justify more coordinated management. Some of these possibilities, and particularly a reconstitution and extension of the present Interservice Supply Support Committee, are examined in this article.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606915

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICE-QUANTITY ADJUSTMENTS IN MULTIPLE MARKETS WITH RISING DEMANDS,

Personal Author(s):

ARROW,Kenneth J

Report Date:

07 May 1958

Media Count:

12 Page(s)

Report Number(s):

P-1364-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An economic analysis of the engineer - scientist market.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606913

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REPRESENTATION THEOREMS AND INEQUALITIES FOR HERMITIAN MATRICES,

Personal Author(s):

Bellman,Richard

Report Date:

06 May 1958

Media Count:

12 Page(s)

Report Number(s):

P-1361

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper, the author establishes an analogue of an integral representation for positive definite hermitian matrices. This result is then used to derive a number of known inequalities and to obtain various generalizations.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606900

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LEAST SQUARES ESTIMATION IN FINITE PROCESSES,

Personal Author(s):

Madansky,Albert

Report Date:

05 May 1958

Media Count:

12 Page(s)

Report Number(s):

P-1358

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A consistent estimate of the transitional probability matrix of a finite Markov process is given in the case when at each point in time only the proportions of the sample in each state are known. It is shown that this estimate is asymptotically more efficient, in a sense defined in the paper, than previously considered estimates for this matrix. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606912

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELASTIC EQUILIBRIUM OF A PLATE WITH A REINFORCED ELLIPTICAL HOLE,

Personal Author(s):

LEVIN,E

Report Date:

05 May 1958

Media Count:

8 Page(s)

Report Number(s):

P-1360

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An infinite thin plate with an elliptical hole reinforced by a confocal elliptical ring is subjected to loads in the plane. A solution to the generalized plane stress problem is obtained using the complex variable techniques of Muskhelishvili. The result is presented in a form wellsuited to evaluation by digital computers. Specialization to a circular hole with a negligibly thin reinforcement is shown to be in agreement with results obtained by other authors. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606852

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ASYMPTOTIC SERIES FOR THE SOLUTIONS OF LINEAR DIFFERENTIAL-DIFFERENCE EQUATIONS,

Personal Author(s):

Bellman,Richard

Report Date:

02 May 1958

Media Count:

16 Page(s)

Report Number(s):

P-1316

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem of determining the asymptotic nature of the solution of linear differential-difference equations of the form $x'(t) = A(t)x(t) + B(t)x(t-1)$, where the coefficients $A(t)$ and $B(t)$ possess asymptotic series expansions has previously been treated only under quite special conditions and by quite complicated methods. The purpose of this paper is to present a new technique which will yield more comprehensive results. To illustrate the method, unhindered by analytic details, the author considers the scalar version of the foregoing equation and treat only the asymptotic series of the solution associated with the characteristic root of the largest real part.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605098

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A UNIFIED PROCESS FOR THE EVALUATION OF THE ZEROS OF POLYNOMIALS OVER THE COMPLEX NUMBER FIELD,

Personal Author(s):

Derr,John I

Report Date:

30 Apr 1958

Media Count:

20 Page(s)

Report Number(s):

P-948

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A Polynomial equation $f(z) = 0$ in a complex variable z , where $f(z)$ has complex coefficients is considered. Use is made of Newton's method for the evaluation of the zeros of the analytic function generalized by the conventional recurrence relation to solve the equation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606911

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON 'HEURISTIC PROBLEM SOLVING' BY SIMON AND NEWELL,

Personal Author(s):

Bellman, Richard

Report Date:

29 Apr 1958

Media Count:

4 Page(s)

Report Number(s):

P-1356

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A polemic on an article by Simon and Newell, Heuristic Problem Solving, in which four predictions are made concerning the usage of computers within ten years, predictions concerning the discovery of important mathematical theorems, the writing of worthwhile music, the future dependence of the major part of the field of psychology upon computers, and the dethroning of the current world chess champion by a computer.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606909

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET INDUSTRY FIVE YEARS AFTER STALIN,

Personal Author(s):

Hoeffding, Oleg

Report Date:

28 Apr 1958

Media Count:

1 Page(s)

Report Number(s):

P-1354

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) For Soviet industry, the five years since Stalin's death were a period of continuous readjustment to a succession of economic policy changes which reflected the contentions among the top political leadership during Khrushchev's ascent to exclusive power. Considering the vacillations of policy, and re-shuffling of the machinery of administration and planning to which Soviet industry has been exposed, its over-all performance was remarkably impressive.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606905

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME FINITE POPULATION UNBIASED RATIO AND REGRESSION ESTIMATORS,

Personal Author(s):

Mickey,M R

Report Date:

25 Apr 1958

Media Count:

8 Page(s)

Report Number(s):

P-1348

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A class of ratio and regression type estimators is given such that the estimators are unbiased for random sampling, without replacement, from a finite population. Nonnegative, unbiased estimators of estimator variance are provided for a subclass. Similar results are given for the case of generalized procedures of sampling without replacement. Efficiency is compared with comparable estimation sample selection methods for this case.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606766

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET UNION AND THE ATOM: TOWARD NUCLEAR MATURITY,

Personal Author(s):

Kramish,Arnold

Report Date:

25 Apr 1958

Media Count:

116 Page(s)

Report Number(s):

RM-2163

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Soviet Union has never issued formal periodic reports as do all western governments on the organization and progress of the atomic energy program. Even though in the west the military aspects of atomic energy are still classified, reports are available which give at least the organizational structure, the institutes, and the sites involved in weapons research and development. It is consequently with the greatest of difficulty that information on the Soviet program can be obtained. That which is presented here must be considered extremely sketchy, and, in the interests of accuracy, no speculative reports have been referenced. While this paper does not presume to be the Soviet counterpart of the 'Smyth Report,' it is believed that this final section of 'The Soviet Union and the Atom' presents close to the maximum amount of general descriptive information which can be combed from publicly available materials on the USSR atomic energy program.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606907

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE POLITICAL POSITION OF THE SOVIET ARMY SINCE STALIN,

Personal Author(s):

Goure, Leon

Report Date:

23 Apr 1958

Media Count:

8 Page(s)

Report Number(s):

P-1351

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The relationship of the Soviet Army to the Communist Party and its leaders has always been complex and generally unsatisfactory to all concerned. The security of the Soviet state demands that there be powerful armed forces at its disposal. But while the Party is a minority elite group, the armed forces are national in character and the Communists have always disrupted the people. The masters of the Soviet Union who cannot forget that the armed forces, by their nature, are potentially the strongest element in the state, have consequently always feared Bonapartism. The Party therefore has to subordinate the military to its will and to control it very closely. Various party organizations and the special department of the security police have maintained such controls at all levels of the armed forces. Although always extensive, the actual degree of party control has varied with the leadership's views concerning the loyalty of the armed forces as well as with the requirements of military efficiency. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606363

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A LINEAR PROGRAMMING APPROACH TO THE CHEMICAL EQUILIBRIUM PROBLEM,

Personal Author(s):

DDantzig,George

Johnson,Selmer r

White,Wayne

Report Date:

21 Apr 1958

Media Count:

8 Page(s)

Report Number(s):

P-1060

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The well known chemical equilibrium problem is expressed in the form of minimizing the free energy of a mixture in order to compute the chemical composition at equilibrium. By piece-wise linear approximations to the free energy function, the problem becomes a linear program which can be solved by a standard code on a computing machine. Successive approximations give any degree of accuracy.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0490073

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/490073.pdf

Size: 27 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD490073>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) STOCKAGE POLICIES FOR MEDIUM AND LOW-COST PARTS

Personal Author(s):

Ferguson, Allellallen R

Fisher, Lawrence

Report Date:

18 Apr 1958

Media Count:

177 Page(s)

Report Number(s):

RAND-RM-1962

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This Research Memorandum presents for Air Force consideration some simple and practical proposals for provisioning and distributing - those items for which detailed intensive management is not appropriate, for example, Cost Category II and III items. These policies are complementary to deferred procurement policies for some Category I items. While either could be implemented alone, together they would provide increased supply effectiveness and economy through buying fewer costly parts and investing some of the saving in base stocks of cheap items. They would entail more management and closer control of the expensive parts, but decreased material movement, paper processing and priority resupply of the low-cost parts.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606843

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A LINEAR PROGRAMMING-COMBINATORIAL APPROACH TO THE TRAVELING SALESMAN PROBLEM,

Personal Author(s):

Dantzig,G B

Fulkerson,D R

Johnson,S M

Report Date:

16 Apr 1958

Media Count:

14 Page(s)

Report Number(s):

P-1281

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606902

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) USE OF A SIMULATION LABORATORY TO STUDY THE ORGANIZATION AND EFFECTIVENESS OF AIR FORCE LOGISTICS,

Personal Author(s):

Enke,Stephen

Report Date:

16 Apr 1958

Media Count:

8 Page(s)

Report Number(s):

P-1343

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Logistics Systems Laboratory concluded its first large-scale simulation. Two sets of supply policies were compared, and the 'new' set was tested for operability, all within a simulated Air Force logistics system including bases, supply depots, a parts repair depot, a contractor's plant, an electronic data-processing center, various agencies within the Air Material Command, and certain other Command headquarters.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606866

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC RESEARCH ON SOUTHEAST ASIA IN THE UNITED STATES: STATUS AND NEEDS,

Personal Author(s):

Wolf, Charles , Jr

Report Date:

16 Apr 1958

Media Count:

8 Page(s)

Report Number(s):

P-1340-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The author contends that most economic research on Southeast Asia in the United States is and has been descriptive, and, in a loose sense, evaluative. Second, concerning needs, Southeast Asian economic research ought to be more scientific, or rigorously theoretical than it has generally been.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605746

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON METHODS OF ANALYSIS OF SOME EXTREMAL PROBLEMS IN PLANNING PRODUCTION,

Personal Author(s):

Kantorovich, L V

Report Date:

15 Apr 1958

Media Count:

8 Page(s)

Report Number(s):

T-86

TT-64 71365

Monitor Series:

64 71365

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the investigation of questions, connected with a component of a rational plan, whose purpose is the best uses of the resources and maximum output of the required products, a method of analysis was introduced using mathematical models for the indicated problems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0656681

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRANSIENT FLOWS IN NETWORKS.

Descriptive Note:

Revised ed.,

Personal Author(s):

Gale,David

Report Date:

11 Apr 1958

Media Count:

14 Page(s)

Report Number(s):

P-1264

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is concerned with flows in two-terminal dynamic networks as defined by Ford and Fulkerson. These authors have shown how to construct for each positive integer k a flow ϕ_k that maximizes the amount u_k shipped from source to sink in k time periods. Their method leads to different functions ϕ_k for different values of k . It is here shown that the problem can be solved by means of a single flow ϕ that at each time k maximizes the cumulative amount shipped from source to sink; the conclusion holds even when the capacities and transit times in the network are allowed to vary with time. The results of this paper are applicable, for instance, to the analysis of logistics problems involving railway networks. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606865

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE WRITER, THE EDITOR, THE PUBLISHER, AND THE READER,

Personal Author(s):

Haydon,Brownlee

Report Date:

10 Apr 1958

Media Count:

8 Page(s)

Report Number(s):

P-1339

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The discussion deals with documentation, storage, retrieval, abstracting, etc. For the sake of argument, the accompanying paper suggests that all these troubles could be ameliorated if scientists would resist the temptation to publish, and if referees, journal editors, and book publishers--not to mention readers--would use more discrimination.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606853

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET EMPLOYMENT OF MILITARY STRENGTH FOR POLITICAL PURPOSES,

Personal Author(s):

Dinerstein,Herbert S

Report Date:

10 Apr 1958

Media Count:

24 Page(s)

Report Number(s):

P-1317

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper seeks to demonstrate that changes in the nature of war and in the political organization of the world make it much more difficult for the Soviet Union to expand politically and territorially than did Germany and Japan when they made, and then partially enforced, their claim to a place in the sun. The doctrinaire Marxist belief that Communism must wax as capitalism wanes reinforces the caution and conservatism dictated by military and political considerations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0627202

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC REPLACEMENT POLICY. AN ABBREVIATED VERSION OF R-224.

Descriptive Note:

Research memo.,

Personal Author(s):

Alchian, Armen

Report Date:

09 Apr 1958

Media Count:

34 Page(s)

Report Number(s):

RM-2153

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Contents: Chapter 1, Introduction. Chapter 2, Elements of the replacement problem: Costs, Service streams, Computational procedure, Electronic computer solutions, Limited period of service, Discrete changes. Chapter 3, Mathematical formulation: Notation in mathematical formulation, Exponential approximation -- computational methods, Limited period of service, Nonanalytic functional forms. Chapter 6, Some issues common to all applications: Service valuation, What rate of interest, Effect of uncertainty of forecasts, Related investment decisions, Applicability to air force equipment.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606861

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPROXIMATION IN POLICY SPACE, LINEAR AND NONLINEAR PROGRAMMING,

Personal Author(s):

Bellman, Richard

Report Date:

07 Apr 1958

Media Count:

8 Page(s)

Report Number(s):

P-1333

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606863

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RUSSIAN URBAN WORKER: FROM SERF TO PROLETARIAN,

Personal Author(s):

Gliksman, Jerzy G

Report Date:

07 Apr 1958

Media Count:

30 Page(s)

Report Number(s):

P-1336

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The emancipation of the serfs in 1861 and the upheaval in industry and agriculture of 1928-1932 are undoubtedly the crucial milestones on the road to the formation of the Russian working class as we know it now. Emerging from serfs and peasantry, this class acquired the features of a modern urban proletariat in the continuous process of industrialization of the country.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606858

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POISSON'S RATIO FOR HONEYCOMB SANDWICH CORES,

Personal Author(s):

Hoffman, George A

Report Date:

07 Apr 1958

Media Count:

6 Page(s)

Report Number(s):

P-1330

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An interesting mechanical property of honeycomb cores is their Poisson's ratio: it is very sensitive to cell geometry and can assume values from zero to about three. Large values may be observed when flexing some slabs of honeycomb with flat cell walls, while rippled wall honeycombs demonstrate zero Poisson's ratio. The ratio of anticlastic curvatures is indicative of the value of Poisson's ratio for axial loading in the plane of the slab. Equilateral hexagonal and square cells were considered here; the doubled foil line the x-direction, and the cell width, a , the spacing between doubled foil lines (see insert, Fig. 1). The angle d between the x-axis and an adjacent wall is 60 degrees for regular hexagonal cells, though in practice it may be much less (the so-called under-expanded core), or well beyond 60 degrees over-expanded cores). Reducing the doubled foil line to a minimum, results in a nearly quadrilateral cell, herein assumed square. Conforming to common practice, the doubled foil line was assumed parallel or perpendicular to the loading or bend axis.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606859

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL EQUATIONS IN THE THEORY OF DYNAMIC PROGRAMMING. IX. VARIATIONAL ANALYSIS, ANALYTIC CONTINUATION, AND IMBEDDING OF OPERATORS,

Personal Author(s):

Bellman,Richard

Lehman,Sherman

Report Date:

07 Apr 1958

Media Count:

6 Page(s)

Report Number(s):

P-1331

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper it is shown how variational techniques can be applied to deduce properties for complex operators and for operators which are non-symmetric. For complex operators use is made of a min-max variation and analytic continuation, if necessary, while for non-symmetric operators an imbedding technique was used, along with analytic continuation when required. A non-symmetric operator is imbedded within a family of symmetric operators associated with a variational problem. Once the variational problem has been formulated one can apply the functional equation techniques of the theory of dynamic programming.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606864

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SWEEPBACK THEORY FOR SHOCK WAVES AT HYPERSONIC SPEEDS,

Personal Author(s):

Cole,J D

Report Date:

04 Apr 1958

Media Count:

8 Page(s)

Report Number(s):

P-1337

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The report presents the results of hypersonic smalldeflection theory for the pressure coefficient, density, and other characteristics behind the shock wave on a sweptback wedge. The results have application to computation of the pressure on sweptback wings of wedge cross-section outside the region of influence of the tips. They can also be used to estimate the lift of a flat delta wing flying at very high speeds. In addition, the behavior of the shock waves deduced here is the first step in computing non-uniform flow fields behind the shock wave.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606841

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LINGUISTIC ANALYSIS IN MACHINE TRANSLATION RESEARCH,

Personal Author(s):

Edmundson,H P

Report Date:
04 Apr 1958
Media Count:
12 Page(s)
Report Number(s):
P-1328
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0606857
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) AN INTRODUCTION TO GUIDED MISSILES,
Personal Author(s):
CHESTER,J M
Report Date:
04 Apr 1958
Media Count:
14 Page(s)
Report Number(s):
P-1327
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0606854
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) AUTOMATIC COMPUTERS IN MACHINETRANSLATION RESEARCH,
Personal Author(s):
Hays,D G
Report Date:
04 Apr 1958
Media Count:
12 Page(s)
Report Number(s):
P-1321
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0605745
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOME SOVIET VIEWS ON AIR STRATEGY (4 ARTICLES),
Personal Author(s):
Kravtsov,I V
Kravchenko,A
Polyakov,A
aleksandrov,B
Report Date:
03 Apr 1958
Media Count:
8 Page(s)
Report Number(s):
T-84

TT-64 71364

Monitor Series:

64 71364

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Partial translations of several Soviet articles on air strategy, particularly on the state of the art in the United States, are presented. The translated portion of the first article concerns itself with the Soviet view of U.S. - NATO strategic doctrine. The next three excerpts are from a Soviet air force newspaper. Two of them also deal with the American air strategy; the third discusses the impact of modern air technology on the conduct of war.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606856

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) 'WAR-1974', BY ROBERT B. RIGG.

Descriptive Note:

A book review,

Personal Author(s):

Reinhardt,G C

Report Date:

02 Apr 1958

Media Count:

8 Page(s)

Report Number(s):

P-1326

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) 'War-1974' by Lt. Col. Robert B. Rigg is short on humor, intentional or otherwise. Those concerned with the international impact of a technological breakthrough (in tactics as well as hardware) will be interested. Col. Rigg submits a forecast substantiated, he says, by (quoted) progress that offers a provoking checklist of possible vs. impossible developments. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0150694

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/150694.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD150694>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ACHIEVEMENT OF VERY HIGH LIFT-DRAG RATIOS AT SUPERSONIC SPEEDS THROUGH DRAG TRANSFORMATION AND REDUCTION

Personal Author(s):

Johnson, Roger P

Report Date:

Apr 1958

Media Count:

44 Page(s)

Report Number(s):

RAND-RM-2154

XC-WL/WP

Contract Number:

AF 33(038)-6413

Monitor Series:

WL/WP

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607067

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SURFACE DISPLACEMENTS IN AN ELASTIC HALFSPACE,

Personal Author(s):

Lang,H A

Report Date:

01 Apr 1958

Media Count:

42 Page(s)

Report Number(s):

P-1498

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This is a preliminary report of results obtained in an investigation of elastic ground waves initiated by a point load (having a Heaviside time variation) acting on the surface of, in particular, an elastic half-space. The results consist of 1. Integral expressions for displacements and associated potentials everywhere in the halfspace for the separate contributions from the P, S, M and Rayleigh surface wave systems. 2. Explicit expressions and curves for the surface displacements for each type of wave. The total surface displacements (evaluated for $\nu = 1/4$) reduce to known expressions obtained by Pekeris. The term 'preliminary report' is intended to imply that the completeness of the solution and the physical interpretation of results will be discussed in subsequent papers. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0490835

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A GUIDE TO THE STUDY OF SPACE LAW, INCLUDING A SELECTIVE BIBLIOGRAPHY ON THE LEGAL AND POLITICAL ASPECTS OF SPACE,

Personal Author(s):

Hogan, John C

Report Date:

01 Apr 1958

Media Count:

55 Page(s)

Report Number(s):

P1290

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606604

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONTRASTS IN LARGE FILE MEMORIES FOR LARGE SCALE COMPUTERS,

Personal Author(s):

POSTLEY, John A

Report Date:

27 Mar 1958

Media Count:

8 Page(s)

Report Number(s):

P-1230

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The increasing requirement for very large files in digital computer systems has lead to the identification of several important characteristics of these files, and to the development of files which exhibit these characteristics in varying degrees. As a result, a new situation has been created wherein a detailed study of these characteristics will now be necessary in some applications to determine the particular file most suitable for the problem or problems to be dealt with.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606440

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SUGGESTED COMPUTATION FOR MAXIMAL MULTI-COMMODITY NETWORK FLOWS,

Personal Author(s):

Ford,L R ,Jr

fulkerson,D R

Report Date:

27 Mar 1958

Media Count:

12 Page(s)

Report Number(s):

P-1114

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A simplex computation for an arc-chain formulation of the maximal multi-commodity network flow problem is proposed. Since the number of variables in this formulation is too large to be dealt with explicitly, the computation treats non-basic variables implicitly by replacing the usual method of determining a vector to enter the basis with several applications of a combinatorial algorithm for finding a shortest chain joining a pair of points in a network. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605858

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CAUSES OF SYSTEMATIC ERROR IN THE COST ESTIMATES OF PUBLIC WORKS,

Personal Author(s):

Giquet,R

Morlat,G

Report Date:

24 Mar 1958

Media Count:

8 Page(s)

Report Number(s):

T-76

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The cost of any single work cannot be exactly foreseen; consequently, the estimation of the cost of a series of works constituting a program appears as a random variable. Everybody admits the truth of this proposition, but financiers in general are astonished that the errors due to underestimation on the part of the engineers occur more frequently and are of greater magnitude than errors due to overestimation. Some of them impute this systematic error to a purposeful underestimation of costs, and this suspicion, tacit though it may be, contributes to embittering the relationship between financiers and engineers, to the great prejudice of the general welfare. Among reasons that have a certain explanatory value in this matter, the authors -- without pretending to exhaust the subject -- have singled out two different

phenomena: (1) when it is a matter of reproducing the same work a great many times, there are reasons why the probability curve of errors affecting the estimated cost appears asymmetric; and (2) when it is a matter of a program that involves selection from among a given number of projects, and if the criterion of choice takes into account the cost of production, it appears that the error made in this estimate becomes one of the elements of choice.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606851

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON 'SOLUTION OF THE QUOTA PROBLEM BY A SUCCESSIVE-REDUCTION METHOD' BY D. F. VOTAW, JR.,

Personal Author(s):

Fulkerson,D R

Gale,D

Report Date:

20 Mar 1958

Media Count:

6 Page(s)

Report Number(s):

P-1315

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is pointed out that the 'Quota Problem' as described by D.F. Votaw, Jr., in JORSA, Vol. 6, No. 1, can be looked upon as a special kind of maximum flow problem. As such it can be solved more efficiently by the methods of Ford and Fulkerson than by the reduction method proposed by Votaw. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606624

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROGRAMMING AND MODIFICATION IN THE SHARE 709 SYSTEM,

Personal Author(s):

Greenwald,Irwin D

Kane,Maureen

Report Date:

19 Mar 1958

Media Count:

16 Page(s)

Report Number(s):

P-1273

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The SHARE 709 system permits the programmer to communicate with the machine and with itself entirely in a symbolic language. The compiler specifications including instruction format, pseudo operations, program library, and system and programmer-macro operation generators are described. The methods for handling symbolic input/output, symbolic debugging, and symbolic modification of a compiled program are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0156031

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Additive Generation of Pseudorandom Numbers,

Report Date:

18 Mar 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606850

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHY BERYLLIUM,

Personal Author(s):

DeHaven,James C

Report Date:

14 Mar 1958

Media Count:

10 Page(s)

Report Number(s):

P-1307

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analysis of the use of beryllium in aircraft construction.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606098

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROPAGATION CONSIDERATIONS IN SPACE OPERATIONS,

Personal Author(s):

Crain,Cullen M

Report Date:

06 Mar 1958

Media Count:

1 Page(s)

Report Number(s):

P-1305

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The propagation factors which are pertinent in radio links between the earth and space vehicles, and also radio links between vehicles operating well beyond the earth's atmosphere are considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605744

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET COMMENTARY ON THE DOCTRINE OF LIMITED NUCLEAR WARS: SMOKE SCREEN OF THE AMERICAN IMPERIALISTS,

Personal Author(s):

Mochalov,V

Dashichev,V

Report Date:

05 Mar 1958

Media Count:

8 Page(s)

Report Number(s):

T-82

TT-64 71363

Monitor Series:

64 71363

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The American foreign policy regarding limited warfare and the use of nuclear weapons is presented. The American policy is described by the Soviet press as imperialistic, aggressive, and politically dangerous.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605767

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANTI-ATOMIC DEFENSE IN THE SOVIET AIR FORCE: EACH AIRMAN SHOULD HAVE BETTER KNOWLEDGE AND SKILL IN ANTI-ATOMIC DEFENSE.

Report Date:

05 Mar 1958

Media Count:

8 Page(s)

Report Number(s):

T-83

TT-64 71348

Monitor Series:

64 71348

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) At the foundations of the training of Soviet soldier-airmen is a principle -- to teach that which is essential to know for fighting a war. To assume the successful realization of this principle under present conditions means to show constant interest in the thorough study and training in anti-atomic defense under various conditions of military operations. Training under conditions approximating actual battle conditions, which take into account a possible atomic attack will help to round out the reactions of Soviet airmen, will develop in them a high level of morale-fighting qualities. All this will contribute to the further growth of the fighting power of the Soviet Air Force.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606615

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND NEUTRON TRANSPORT THEORY. II: FUNCTIONAL EQUATIONS,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Wing,G Milton

Report Date:

05 Mar 1958

Media Count:

32 Page(s)

Report Number(s):

P-1252

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some one-dimensional fission processes are considered with particular regard to questions of critical length and energy dependence of the products of fission. Various interconnections between the functions used in the invariant imbedding approach and the classical approach are indicated. In particular it is shown how one may pass from the consideration of certain linear two-point boundary value problems to nonlinear (Riccati type) initial value problems. The former are useful for theoretical considerations, the latter for numerical computation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606849

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOL. 28,

Personal Author(s):

Hastings,Cecil ,Jr

Hastings,Elaine

Report Date:

04 Mar 1958

Media Count:

8 Page(s)

Report Number(s):

P-1301

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of Gaussian error integrals are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606848

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/606848.pdf

Size: 740 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Meteorological Aspects of Infrared Operations

Descriptive Note:

Conference paper

Personal Author(s):

Sartor, J D

Report Date:

03 Mar 1958

Media Count:

18 Page(s)

Report Number(s):

P-1299

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

20 - JOURNAL ARTICLES; DTIC USERS ONLY

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Available only to DTIC users. U.S. Government or Federal Purpose Rights License. Document partially illegible.

Abstract:

(U) Three types of meteorological information are useful for infrared studies. The first type consists of average or usual conditions which can be applied most of the time. The second and third types are concerned directly with larger variations in time and space. They are distinguished by the length of time

period between a request for information and its planned application. If the period falls within about 72 hours of the time of the request, a forecast for the future period is best. For longer periods in the future, meteorological studies of accumulated past data are appropriate. When properly applied these produce valuable and useful results. It is this latter type of information that is discussed in this paper.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422570

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPLICATION OF OPERATIONS RESEARCH TO DEVELOPMENT DECISIONS,

Personal Author(s):

Klein,Burton

Meckling,William

Report Date:

03 Mar 1958

Media Count:

19 Page(s)

Report Number(s):

P1054

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is the main argument of this paper that an efficient allocation of the development budget is a very different sort of a problem from the efficient conduct of a current operation. We attempt to show that the problem is essentially not one of choosing among specific end-product alternatives, but rather a problem of choosing a course of action initially consistent with a wide range of such alternatives; and of narrowing the choice as development proceeds. The implications, for the analyst, of viewing the development problem as this kind of problem are sketched in the concluding section of the paper.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605743

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EQUATION OF STATE OF HYDROGEN AT HIGH PRESSURES,

Personal Author(s):

Abrikosov,A A

Report Date:

03 Mar 1958

Media Count:

8 Page(s)

Report Number(s):

TT-64 71362

Monitor Series:

64 71362

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The equation of state of hydrogen is examined for P 2,000,000. atm. At 2,400,000 atm. there exists a transition from the molecular to the atomic modification accompanied by a discontinuous increase in the density from 0.621 g/sq.cm. to 1.12 gm/sq.cm. The limits of applicability of the calculations are explored. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0608750

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EXPLOITATION OF THE STRENGTH OF 'WHISKERS,'

Personal Author(s):

Hoffman,George A

Report Date:

01 Mar 1958

Media Count:

16 Page(s)

Report Number(s):

P-1294

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The possibility of putting the phenomenal strength of 'whiskers' to use for structural purposes is investigated in this paper. The properties of 'whiskers' and the structural characteristics of hypothetical materials composed from them permit comparing the weights of tension structures made from whiskers with the weights of structures made from conventional materials. Reductions to one-fifth of the conventional weight appear to be feasible. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606847

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CRISIS IN MILITARY AFFAIRS,

Personal Author(s):

KAUFMANN,William W

Report Date:

28 Feb 1958

Media Count:

48 Page(s)

Report Number(s):

P-1295

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the years since World War II, American statesmen have found themselves increasingly preoccupied with military problems in their efforts to maintain and advance the interests of the United States. Not only have they had to decide how to deal with the various military threats to these interests. They have also had to take strategic considerations and the risk of war into account in all their day-to-day dealings with the outside world. Their task would have proved difficult enough had they had to confront the hostility of the Soviet empire with the traditional means of warfare. It has become almost unimaginably complex as a result of growing Russian power and what appears to be a continuing revolution in the technology of military weaponry. As a somewhat extended review of Nuclear Weapons and Foreign Policy, by Henry A. Kissinger, this paper discusses the Merits of the book in terms of its significance in matters of both military and foreign policy.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604814

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNICATIONS IN SPACE OPERATIONS,

Personal Author(s):

CRAIN,C M

Gabler,R T

Report Date:

24 Feb 1958

Media Count:

20 Page(s)

Report Number(s):

P-1394

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to explore the many practical factors involved in earth-space vehicle communication problem, to indicate the factors which will influence most strongly the system designs, and to point out areas in which research and development appear needed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606844

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMBINATORIAL PROCESSES AND DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman,Richard

Report Date:

24 Feb 1958

Media Count:

68 Page(s)

Report Number(s):

P-1284

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to discuss the application of dynamic programming techniques to a class of problems which for want of a better term are called combinatorial.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606943

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TYPES OF SPACE FLIGHTS,

Personal Author(s):

Buchheim,R W

Report Date:

24 Feb 1958

Media Count:

8 Page(s)

Report Number(s):

P-1428

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Trajectory characteristics of three general categories of space flight are discussed: earth satellite missions, lunar missions, and interplanetary missions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606845

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON 'EFFICIENT ESTIMATION AND LOCAL IDENTIFICATION IN LATENT CLASS ANALYSIS',

Personal Author(s):

Madansky,Albert

Report Date:

24 Feb 1958

Media Count:

4 Page(s)

Report Number(s):

P-1289

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Corrected versions of information functions stated by R. B. McHugh in his work, 'Efficient Estimation and Local Identification in Latent Class Analysis' are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224047

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Penetration of Planetary Atmospheres,

Report Date:

24 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0666590

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET ASTRONAUTICS,

Personal Author(s):

Krieger, F J

Report Date:

24 Feb 1958

Media Count:

30 Page(s)

Report Number(s):

P-1437

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper describes the history of Soviet interest in space flight leading up to the launching of Sputniks I and II. A discussion of Soviet technical and popular literature on space flight is included.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606846

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLE DEVICE FOR ASSESSING GUN-CAMERA FILM AGAINST BANNER TARGETS,

Personal Author(s):

Jenkins, J L

Report Date:

21 Feb 1958

Media Count:

8 Page(s)

Report Number(s):

P-1285

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606842

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STABILITY THEORY AND ADJOINT OPERATORS FOR LINEAR DIFFERENTIAL-DIFFERENCE EQUATIONS,

Personal Author(s):

Bellman, Richard

Cooke, K L

Report Date:

14 Feb 1958

Media Count:

64 Page(s)

Report Number(s):

P-1280

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper extends to linear differential-difference equations a number of results familiar in the stability theory of ordinary linear differential equations. In this theory, one considers a system of equations of the form (1) $dx/dt = A(t)x$, $x(0) = c$, where t is a real variable, x is a column vector with n rows, and $A(t)$ is an n - by n matrix, and a perturbed system (2) $dx/dt = (A(t) + B(t))x$. In general terms, the stability problem is to determine conditions on the matrix B sufficient to ensure that some property

of all solutions of (1)- such as boundedness or order of growth - will also be a property of all solutions of (2).

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0341090

Full Text (pdf) Availability:

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Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A NEW MODEL FOR FALLOUT CALCULATIONS

Personal Author(s):

Rapp, R R

Report Date:

13 Feb 1958

Media Count:

58 Page(s)

Report Number(s):

RM-2115

AFSWP-1069

XV-1069

Monitor Series:

1069

DTRA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution unlimited

Abstract:

(U) This paper presents a new model for the machine calculation of fallout patterns. The model is divided into three parts: (1) meteorological, which considers wind velocity and the fall velocity of the particles; (2) geometric, which considers distribution of activity on particles in the cloud as a function of height and particle size; and (3) radiological, which considers the radiation doses of particles on the ground. The use of the model is illustrated, and the changes in the model that will provide an optimum model (currently being developed) are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606908

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GENERAL DESCRIPTION OF A COOPERATIVE ANTI-COLLISION SYSTEM FOR AIRCRAFT,

Personal Author(s):

EARLY,L B

Report Date:

08 Feb 1958

Media Count:

4 Page(s)

Report Number(s):

P-1353

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A system, which requires no advance in the state of the art of communication techniques, for the prevention of aircraft mid-air collisions is presented. This cooperative system utilizes radio transmitters and receivers in the aircraft and presents the following information to each aircraft: presence of another aircraft; relative position, bearing, and elevation of the aircraft; closing and opening rate; and, course of the other aircraft.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606625

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHAT THE FACTORY WORKER KNOWS ABOUT HIS FACTORY,

Personal Author(s):

Fagg, Donald R

Kaysen, Carl

McKean, Roland N

Report Date:

07 Feb 1958

Media Count:

62 Page(s)

Report Number(s):

P-1275

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An attempt was made to measure the variability in the knowledge that workers have about their factory. The original purpose of the study was to learn more about the confidence that could be attached to information about one country's economy that often reaches another nation's hands. Refugees, for example, often bring with them scraps of information about their former situation, and clues to the reliability of such data are important. But the results of the study may be pertinent in many other connections. Businessmen may be interested in knowing whether or not employees ordinarily have accurate information about their company. They may wish to know whether or not reliable data can be obtained from a small sample of a firm's employees. The results may also be pertinent to the businessman's interpretation of any kind of poll or survey that seeks factual information (as contrasted with 'attitude surveys'). Finally, since it is sometimes necessary to form opinions and make decisions on the basis of the testimony of a few witnesses, the reports of a few observers, or the estimates of a few participants, recognition of the variability of any estimate, however derived, may be extremely important in decision-making.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606924

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND NEUTRON TRANSPORT THEORY - A GENERALIZED APPROACH,

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Wing, G Milton

Report Date:

07 Feb 1958

Media Count:

8 Page(s)

Report Number(s):

P-1380

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In previous papers the theory of invariant imbedding has been applied to a variety of transport problems. Each problem has been treated individually and any change in the geometry of the medium or energy distribution of the neutrons has called for a new investigation. A general method is presented for dealing with many such cases. A single formula is developed which covers most of the problems considered in past work and leads to new results. A few specializations are indicated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604787

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604787.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604787>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE ROLE OF SCIENCE AND TECHNOLOGY IN MODERN WAR

Personal Author(s):

Pokrovskii, G I

Report Date:

05 Feb 1958

Media Count:

40 Page(s)

Report Number(s):

RAND-T-79

TT-64-71281

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The applicability of science and technology to modern warfare and military affairs is discussed.

Soviet scientific achievements are viewed in terms of their role in the development of modern weapons and in contemporary warfare.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606623

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A GENERALIZATION OF A RESULT OF WINTNER,

Personal Author(s):

Bellman, Richard

Report Date:

04 Feb 1958

Media Count:

6 Page(s)

Report Number(s):

P-1271

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A generalization is obtained of the Hukuwara stability theorem analogous to a recent generalization for second order equations due to Wintner, Quarterly of Applied Mathematics, Vol. XV(1958), pp. 428-430. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606622

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIFT OF SLENDER NOSE SHAPES ACCORDING TO NEWTONIAN THEORY,

Personal Author(s):

COLE, J D

Report Date:

04 Feb 1958

Media Count:

20 Page(s)
Report Number(s):
P-1270
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0244894
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) GRAPHICAL METHODS FOR THE QUANTITATIVE PREDICTION OF CLOSE-IN FALLOUT
Personal Author(s):
KNOX, JOSEPH B
Report Date:
31 Jan 1958
Media Count:
1 Page(s)
Report Number(s):
RM-2108
DASA-1074
Monitor Series:
1074
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606590

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON INITIAL ESTIMATES FOR COMPUTING $A(1/P)$ BY NEWTON'S METHOD,

Personal Author(s):

Derr, John I

Report Date:

31 Jan 1958

Media Count:

9 Page(s)

Report Number(s):

P-1213

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In order to evaluate $a(1/p)$ for a in the interval $(0,1)$ by Newton's method, the standard practice for digital computer programs is to use the uniform initial estimate of 1. By using a piecewise linear approximation the computational effort can in the general case be considerably reduced. The convergence of Newton's method to $a(1/p)$ is analyzed when the 'firstguess' is determined by the above approximation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606621

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE IMAGE OF DUAL RUSSIA,

Personal Author(s):

Tucker, Robert C

Report Date:

30 Jan 1958

Media Count:

44 Page(s)

Report Number(s):

P-1265

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) According to some pre-revolutionary sources, Russians began to talk of a 'thaw' at the close of the reign of Iron Tsar Nicholas I, who died in 1855. The thaw was manifested in a change of atmosphere, a relaxation of censorship, and other signs of softening of the bureaucratic regimentation of society which marked Nicholas' long reign. The image of the thaw projected the period lived through as a gray interminable Russian winter of despotism above and paralysis of society below. The incipient relaxation of state controls was seen as the harbinger of a coming 'spring' of liberalization. The comparison with the official terror of the last years of Stalin's reign, and with the atmosphere in Russia as felt in the early months after his death in 1953, is very striking. No knowledge of obscure history books was needed in order for the word 'thaw' to come back into circulation. For Russia had just lived through another long gray winter of despotism above and paralysis of society below, and was now, once again, awakening to hope for change.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606259

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND STOCHASTIC CONTROL PROCESSES,

Personal Author(s):

Bellman,Richard

Report Date:

27 Jan 1958

Media Count:

21 Page(s)

Report Number(s):

P-1003

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown how the functional equation technique of dynamic programming may be used to obtain a new computational and analytic approach to variational problems. The limited memory capacity of present-day digital computers limits the successful application of these techniques to first and second order systems at the moment, with limited application to higher order systems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606626

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON THE LIFT OF SLENDER NOSE SHAPES ACCORDING TO NEWTONIAN THEORY,

Personal Author(s):

COLE,J D

Report Date:

24 Jan 1958

Media Count:

4 Page(s)

Report Number(s):

P-1276

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0608749

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES OF IONOSPHERIC RADIOPHYSICS BY MEANS OF SATELLITES,

Personal Author(s):

Hoffman, William C

Report Date:

22 Jan 1958

Media Count:

37 Page(s)

Report Number(s):

P-1263

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606620

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON CONVERGENT PERTURBATION EXPANSIONS,

Personal Author(s):

Bellman, Richard

Fort, Tomlinson

Report Date:

21 Jan 1958

Media Count:

8 Page(s)

Report Number(s):

P-1260

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper, consideration is given the SturmLiouville equation and the problem of obtaining power series expansions for the first characteristic value and function.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606619

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BASIC OBJECTIVES OF A CONTINUING PROGRAM OF SCIENTIFIC RESEARCH IN OUTER SPACE,

Personal Author(s):

KELLOGG,W W

Report Date:

16 Jan 1958

Media Count:

44 Page(s)

Report Number(s):

P-1259

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606616

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE LIMITS AND PROBLEMS OF 'DECOMPRESSION': THE CASE OF HUNGARY,

Personal Author(s):

Kecskkemeti,Paul

Report Date:

13 Jan 1958

Media Count:

30 Page(s)

Report Number(s):

P-1253

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Revolt in Hungary might well have been forestalled by a consistent evolutionary policy or, failing this, by a recrudescence of terror. Moscow, however, chose to steer a middle course between these alternatives. It had an illusory faith in the unlimited efficacy of manipulation from above and underestimated the moral factor. The Hungarian developments have demonstrated the fallibility of Moscow's concept of manipulative decompression.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0144299

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A PRIORI DEMAND PREDICTION-A CASE STUDY OF B-52 AIRFRAME PARTS

Personal Author(s):

GOLDMAN, T A

Report Date:

10 Jan 1958
Media Count:
37 Page(s)
Report Number(s):
RM-2088
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0144295
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) BASELOGS-A BASE LOGISTICS MANAGEMENT GAME
Personal Author(s):
GAINEN, L
LEVINE, R A
MCGLOTHIN, W H
Report Date:
08 Jan 1958
Media Count:
17 Page(s)
Report Number(s):
RM-2086
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606613

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON THE MINIMUM VARIANCE OF UNBIASED ESTIMATES OF DOPPLER SHIFT,

Personal Author(s):

Swerling,P

Report Date:

07 Jan 1958

Media Count:

8 Page(s)

Report Number(s):

P-1247

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The calculation of the minimum variance of unbiased estimates of doppler shift is considered when the received waveform is observed against a background of additive white Gaussian noise. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606612

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRIMES IN THE THOUSANDTH MILLION,

Personal Author(s):

Baker,C L

Gruenberger,F J

Report Date:

06 Jan 1958

Media Count:

84 Page(s)

Report Number(s):

P-1245

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An account is given of the method of calculation of a table of 47,957 prime numbers, starting with 999,000,011 and ending with 999,999,937.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606904

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MARGINAL COST FUNCTION FOR HIGHWAY CONSTRUCTION AND OPERATION,

Personal Author(s):

Ferguson,Allen R

Report Date:

30 Dec 1957

Media Count:

1 Page(s)

Report Number(s):

P-1347

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this study is to develop a cost function adequate for assigning highway costs to various classes of vehicles. Costs are defined merely as expenditures of the Highway Department in the construction and operation of the highway system. The study was originally prepared in 1953 for the Virginia Highway Users Association in connection with legislative hearings on highway taxation in the State of Virginia. The data used are fiscal 1952 data for the State. Consequently the numerical results are of little general interest, except as a means of illustrating the method.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606610

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON NATO POOLING,

Personal Author(s):

Hoag,Malcolm W

Report Date:

30 Dec 1957

Media Count:

14 Page(s)

Report Number(s):

P-1242-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The books under review urge greater pooling of effort in NATO, especially of the Military research and development efforts that are most likely to be affected by Sputnik. This review concentrates upon this theme and, more briefly, upon burden sharing.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606618

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FACTORS ASSOCIATED WITH INCOME VARIABILITY,

Personal Author(s):

Bristol,Ralph B ,Jr

Report Date:

29 Dec 1957

Media Count:

22 Page(s)

Report Number(s):

P-1255

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Two recent theories of consumer saving have been based on the assertion that a family's income in a given year, as reported in a cross-section survey, is not the relevant income for explaining its saving behavior. Rather, its income over some longer period of time should be considered. Inasmuch as surveys relying on respondents' recall of income changes from previous years appear to be greatly affected by memory errors, some type of reinterview procedure is necessary. Such a reinterview study was carried out by the Survey Research Center over the years 1954-56, under a grant from the Ford Foundation. A representative cross section of the urban population of the United States was interviewed in June of 1954, and reinterviewed in December of 1954, June of 1955, December of 1955, and March of 1957.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606609

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING, WAVE PROPAGATION AND THE WKB APPROXIMATION,

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Report Date:

26 Dec 1957

Media Count:

8 Page(s)

Report Number(s):

P-1239

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In previous papers, some applications of the principle of invariant imbedding to radiative transfer and neutron diffusion processes were presented. This use of invariance principles was stimulated by the fundamental work of Ambarzumian and Chandrasekhar, and strongly influenced by the point of regeneration technique of Bellman and Harris, and the theory of dynamic programming. Fundamental for the success of these techniques as applied to the above processes is the ability to consider the overall physical process as a sequence of local processes. For the case of particles, this is easily done. This paper indicates how wave propagation may be considered in these terms. It is rather remarkable that the results are based upon an algorithm that, in general, can yield divergent series. Following a provocative paper by Bremmer, the aim is to show that wave propagation can be discussed in terms of reflection and refraction at infinitesimally separated interfaces. It was proven that the convergence of the Bremmer series can be established under a simple assumption concerning the slowly varying nature of the local wave number.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0707674

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/707674.pdf

Size: 673 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD707674>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LEAD-TIME IN MODERN WEAPONS

Personal Author(s):

Novick, David

Report Date:

26 Dec 1957

Media Count:

20 Page(s)

Report Number(s):

RAND-P-1240

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The document discusses lead time as the minimum time requirement for getting new military equipment embodying the latest scientific developments, requiring time for basic research, product research, product development, application engineering, and manufacturing.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606545

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THIN AIRFOILS IN HYPERSONIC FLOW WITH STRONG SHOCKS,

Personal Author(s):

RAYMOND,Joseph L

Report Date:

19 Dec 1957

Media Count:

26 Page(s)

Report Number(s):

P-1189

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The expression for normal force is derived in closed form for the case of hypersonic flow with strong shocks, a logical extension of the isentropic case carried out by Dorrance and by Linnell in the regime $0.1 < K < 10$. The method is especially useful in applications to convex airfoils with continually varying slope whenever the profile can arbitrarily be defined as $y = f(x)$. In this case the closed form solution eliminates the 'piecemeal' tangent-wedge type of approximation which is inherently laborious and limited in accuracy. The expression is derived from a simple relation between the two-dimensional pressure coefficients for shocks and expansion flows. Although this relationship is based on small-disturbance theory the force calculations appear to agree with 'exact' shock-expansion theory and with experiment to angles of attack of 25 degrees, hence is anomalous to a certain extent. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606614

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN MACHINE TRANSLATION 2: RESEARCH METHODOLOGY,

Personal Author(s):

Edmundson,H P

Hays,D G

Report Date:

16 Dec 1957

Media Count:

26 Page(s)

Report Number(s):

P-1251

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper introduces a series that describes the methods now in use for research on machine translation of scientific Russian. The purpose of this series is to clarify the technical problems of computer application in linguistic research, to stimulate research in machine translation, and to encourage standardization of working materials. The general approach being followed and its philosophy and method are described. The method is conveniently divided into four components: text preparation, glossary development, translation, and analysis.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606608

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A FIRST APPROACH TO LOGISTICS SYSTEM SIMULATION,

Personal Author(s):

Geisler, Murray A

Report Date:

16 Dec 1957

Media Count:

18 Page(s)

Report Number(s):

p-1234

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Abstract:

(U) To help reduce the difficulties between invention and implementation, RAND has established a Logistics Systems Laboratory with Air Force support. This laboratory is intended to test and develop improved logistics policies by providing realistic environments in which these new concepts must function. Such experiments are intended to provide information on the data flow systems, organizational changes, and other system effects that would be required to use the proposed policy. In this way, it is hoped that the implementation of such proposals can be accelerated. In this paper, some of the early work of the Logistics Systems Laboratory is presented. A simulation of an Air Force logistics system is described. This system is concerned with providing spare parts to several bases at which aircraft are flown and maintained. This first exercise of the laboratory was intended primarily to give information about the problems of laboratory simulation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606607

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A DIFFERENTIAL INEQUALITY OF CESARI AND TURNER,

Personal Author(s):

Bellman, Richard

Report Date:

16 Dec 1957

Media Count:

6 Page(s)

Report Number(s):

P-1233

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper contains a simplified proof, and indicated generalization, of a result of Cesari and Turner, 'On a Lemma in the Direct Method of the Calculus of Variations.' (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606606

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON PREVENTATIVE SAMPLING,

Personal Author(s):

Kalaba,Robert

Report Date:

13 Dec 1957

Media Count:

8 Page(s)

Report Number(s):

P-1232

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that certain optimization problems of preventative sampling may be handled advantageously using the functional equation technique of dynamic programming. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606605

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A LINEAR PROGRAMMING MODEL OF THE GASEOUS DIFFUSION ISOTOPE-SEPARATION PROCESS,

Personal Author(s):

Fort, Donald

Report Date:

12 Dec 1957

Media Count:

26 Page(s)

Report Number(s):

P-1231

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to show how the gaseous diffusion process for separating uranium isotopes may be treated as a linear programming model. The model is developed by the theoretical or engineering approach, as opposed to empirical methods based on statistical analysis of observations. The model may be useful in the economic analysis of complicated systems involving various feedbacks between gaseous diffusion plant, nuclear reactors, and other facilities involved in the production of nuclear materials and nuclear power. The paper is in three parts. First is a brief description of the physical separation process. Next it is shown how the physical relationships may be translated into linear programming terms. Finally it is briefly indicated how the linear programming model of the gaseous diffusion separation process may enter into larger models of the nuclear materials and power industry. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606611

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELECTRIC POWER FOR SPACE FLIGHT,

Personal Author(s):

Huth,J H

Report Date:

10 Dec 1957

Media Count:

18 Page(s)

Report Number(s):

P-1244

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Scientific satellites require electrical energy to operate a variety of instruments but probably not over something like 100 watts. For trips to the planets, electrical power will likely also be utilized in a thrust system. Examples include ionic propulsion, electrical arc heating of a gas, etc. These will require megawatts of power, particularly for high specific impulse systems. In addition each human occupant may require several kilowatts of electrical energy. For the satellite case power supplies of limited life may be satisfactory; for manned space flight only solar or nuclear sources can be considered. This paper outlines several possibilities, their present limitations and future potential. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606602

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE UTILITY OF A COMMUNICATION CHANNEL AND APPLICATIONS TO SUB-OPTIMAL INFORMATION HANDLING PROCEDURES,

Personal Author(s):

MARCUS,M B

Report Date:

09 Dec 1957

Media Count:

16 Page(s)

Report Number(s):

P-1228

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The functional equation technique of dynamic programming is used to analyze some extensions of the KellyBellman-Kalaba model of communication, and to analyze a null-zone reception system. The role of suboptimum systems is emphasized. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606603

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOL. 27,

Personal Author(s):

Hastings,Cececil

Report Date:

09 Dec 1957

Media Count:

4 Page(s)

Report Number(s):

P-1229

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations are given for incomplete elliptic integrals.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606600

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE COMPUTATIONAL DETERMINATION OF THE NATURE OF SOLUTIONS OF NONLINEAR SYSTEMS WITH STOCHASTIC INPUTS,

Personal Author(s):

Bellman, Richard

Brock, Ppaul

Mizuki, Mikiso

Report Date:

06 Dec 1957

Media Count:

14 Page(s)

Report Number(s):

P-1226

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Nonlinear dynamics problems prove difficult to investigate analytically or numerically if probabilistic terms are involved in their equations. This paper develops a technique for handling problems of this type that is practical only if a high speed computer is available to perform the attendant computations. The method is general, but was applied to the Van der Pol equation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606601

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING APPROACH TO OPTIMAL INVENTORY PROCESSES WITH DELAY IN DELIVERY,

Personal Author(s):

Bellman, Richaahcchard

Report Date:

06 Dec 1957

Media Count:

12 Page(s)

Report Number(s):

P-1227

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The usual dynamic programming approach to inventory processes with delays in delivery leads to functions of many variables. This multi-dimensionality prevents the straightforward utilization of digital computers. Using a type of transformation previously applied in the study of engineering control processes, it is shown that a class of inventory processes with time lags can be treated in terms of sequences of functions of one variable, regardless of the length of the delay. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606599

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/606599.pdf

Size: 3 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD606599>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SECULAR TRENDS IN THE BIRTH RATIO OF WHITES, BY STATES FOR THE UNITED STATES, 1870-1950

Personal Author(s):

Okun, Bernard

Report Date:

03 Dec 1957

Media Count:

79 Page(s)

Report Number(s):

P-1225

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) Consisting of census figures on the distribution of population in the United States by age and sex, the data are reported by states and cover the time span from 1870 to 1950. The age distribution data distinguish five-year intervals, and are recorded separately for native whites and foreign-born whites. In the analysis, there are 46 spatial units. These include each of the 48 states, except Oklahoma for which there are no data prior to 1890 and except for the treatment of North and South Dakota as one unit called Dakota.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606598

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE HUMAN SIDE OF THE BERLIN AIRLIFT,

Personal Author(s):

Davison,W Phillips

Report Date:

03 Dec 1957

Media Count:

28 Page(s)

Report Number(s):

P-1224

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Considerable attention has been given the technical lessons learned from the Berlin airlift, especially in regard to aircraft and air space utilization, training procedures, cargo handling, and so on. Less attention has been given the human factors involved in the airlift's operations, although these were certainly no less important to its success or failure than were the material and organizations aspects. This paper is devoted to a discussion of some of these human factors.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606597

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON WEIGHTED PCM AND MEAN SQUARE DEVIATION,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Report Date:

02 Dec 1957

Media Count:

10 Page(s)

Report Number(s):

P-1223

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Bedrosian has introduced the concept of weighted pulse-code modulation, WPCM. This differs from normal PCM in that the amplitude of the transmitted pulses representing the binary digits in a pulse-code group are made to depend on the size of the group and on the power of two represented by the individual pulses. In general, the higher the power of two represented by the pulse, the larger the amplitude of the pulse. It is shown how the functional equation technique of dynamic programming can be used advantageously in the analysis of WPCM communication system. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606596

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/606596.pdf

Size: 290 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD606596>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Approximate Evaluation of an Expression Arising in the Theory of Time-Delay Estimation

Personal Author(s):

Swerling, P

Report Date:

23 Nov 1957

Media Count:

14 Page(s)

Report Number(s):

P-1221

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) In a previous paper a formula was derived for the greatest lower bound of the variance of unbiased estimates of the time delay between transmission and reception of a waveform, when the received waveform is observed in a background of additive white Gaussian noise. The present paper evaluates this expression approximately for a class of waveforms.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605071

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/605071.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD605071>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A SYSTEMATIC APPROACH TO LOCAL OBJECTIVE FORECAST STUDIES

Personal Author(s):

Sartor, J D

Report Date:

22 Nov 1957

Media Count:

32 Page(s)

Report Number(s):

P-912

XC-AFGWC

Monitor Series:

AFGWC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) Problems in the design, preparation, and use of local objective forecasting studies were evaluated while specific local objective forecasting studies were being made. As a result, a systematic procedure that may be used as a guide in designing and preparing local objective forecasting studies was developed and tested in a number of seminar-workshop groups. The systematic procedure is outlined and discussed with illustrations from several local objective forecasting studies. The procedure consists of defining the local forecasting problem in terms consistent with observing and forecasting capabilities, resolving the variability of the forecast element into its cyclic (seasonal and diurnal) and 'synoptic' components, and finally, reassembling the components into a forecast scheme that allows the forecaster to exercise his training as a meteorologist.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606595

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVENTORY CONTROL; EXPLOITING THE ELECTRONIC DATA PROCESSOR IN THE AIR FORCE,

Personal Author(s):

Gainen, Leon

Report Date:

20 Nov 1957

Media Count:

24 Page(s)

Report Number(s):

P-1220

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper discusses an Air Force logistical EDP application in order to open new vistas for the Industrial Engineer whose familiarity with the data processing field has not been developed in association with his own problem solving techniques.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606270

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) KLAUS KNORR ON WAR POTENTIAL: A BRIEF REVIEW,

Personal Author(s):

Hoag, Malcolm W

Report Date:

18 Nov 1957

Media Count:

1 Page(s)

Report Number(s):

P-1025

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Professor Knorr finds contemporary relevance in the notion of mobilizable war potential, and devotes ninety-odd per cent of his pages to the case, typified by World War II, in which a nation has an opportunity to mobilize its strength fully after hostilities have begun. He deals lucidly and sensibly with this contingency, and can justly claim achievement of his objective: (1) a synthesis of the extensive

postWorld War II literature on economic mobilization which (2) incorporates political and sociological insights bearing upon the will and the ability to organize for fighting.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606593

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOLUME 26,

Personal Author(s):

Hastings,Cecil ,Jr

Hastings,Elaine

Report Date:

15 Nov 1957

Media Count:

3 Page(s)

Report Number(s):

P-1217

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations are given for incomplete elliptic integrals.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606594

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PAIRS OF RUSSIAN WORDS WITH HIGH C CORRELATION,

Personal Author(s):

Hays,David G

Report Date:

15 Nov 1957

Media Count:

70 Page(s)

Report Number(s):

P-1218

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A list of 2731 pairs of Russian words is given; the words in each pair are correlated at the 0.01 level of significance. These pairs were selected upon analysis of the occurrences of 200 words in 4037 pages of general text. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606592

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON POLYNOMIAL AND SEPARABLE GAMES,

Personal Author(s):

Gale,David

Gross,Oliver

Report Date:

14 Nov 1957

Media Count:

17 Page(s)

Report Number(s):

P-1216

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that, given a pair of infinite metric spaces and a pair of respective finite mixed strategies on them, there exists a separable game with bounded continuous payoff on their cartesian product such that the given strategies constitute the unique solution of the game. If the spaces are identical, then, corresponding to any given finite mixture, one can find a symmetric polynomial-like game with bounded (skew-symmetric) continuous payoff such that the given strategy is the only optimal one. A stronger conclusion holds if the spaces are bounded sub spaces of Euclidean n-space with sufficiently many cluster points in their closures, in that the payoff can be a polynomial and have the desired property.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605742

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ARTIFICIAL SATELLITE AND INTERNATIONAL LAW,

Personal Author(s):

Zadorozhnyi,G

Report Date:

12 Nov 1957

Media Count:

8 Page(s)

Report Number(s):

T-78

TT-64 71361

Monitor Series:

64 71361

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper discusses the status of orbiting artificial satellites in relation to air sovereignty of states and international law.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0311461

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/311461.pdf

Size: 3 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD311461>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A FAMILY OF RECOVERABLE RECONNAISSANCE SATELLITES

Descriptive Note:

Research memo.

Personal Author(s):

Davies, M E

Katz, A H

Buchheim, R W

Garber, T B

Huntzicker, J H

Report Date:

12 Nov 1957

Media Count:

130 Page(s)

Report Number(s):

RAND/RM-2012

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution unlimited.

Abstract:

(U) This memorandum describes a reconnaissance satellite system that would provide an early and continuing photographic reconnaissance capability in augmentation of the WS-117L program. Relatively simple in operation, the system would use a camera of essentially conventional design in a comparatively unsophisticated orbiting vehicle. A launching date about one year from the date of contract is contemplated. The system will produce pictures of a scale and resolution that will yield valuable intelligence information about large areas of the Soviet Union. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606539

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN AIRBORNE COLLISION-WARNING DEVICE,

Personal Author(s):

Jenkins,J L

Report Date:

11 Nov 1957

Media Count:

20 Page(s)

Report Number(s):

P-1178

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A simplified airborne collision-warning device is suggested in which each aircraft transmits its barometric altitude by radio. The likelihood of collision is determined by noting relative altitude and variation in signal strength between the two aircraft. While the feasibility of separating signals into 'near' and 'far' categories would have to be determined by flight tests, it is felt that the low cost and early availability of the system justifies its consideration. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0623564

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCATTERING OF LIGHT BY PROTONS.

Descriptive Note:

Revised ed.,

Personal Author(s):

Karzas,W J

Watson,W K R

Zachariasen,F

Report Date:

11 Nov 1957

Media Count:

33 Page(s)

Report Number(s):

P-1126

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Within the framework of the Chew-Low-Wick development an analysis of the scattering of photons from a nucleon is carried out. It is shown that an exact relationship exists between the Compton Effect amplitude and the experimental meson-nucleon scattering phase shifts for all multipoles except magnetic dipole and electric quadrupole provided that effects arising from currents inside the nucleon

source are slowly varying functions of photon energy. That part of the magnetic dipole scattering which can be described in terms of the isotopic vector part of the anomalous magnetic moments of the nucleon is also treated exactly. The cross section for the Compton process is evaluated on the basis of the electric and magnetic dipole contributions only, since a non-recoil theory is clearly expected to be poor for photon energies greater than 300 Mev. Fairly good agreement with experiment is achieved.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606585

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMICS OF A DUAL CAPABILITY,

Personal Author(s):

Hoag, Malcolm W

Report Date:

04 Nov 1957

Media Count:

12 Page(s)

Report Number(s):

P-1195

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A 'dual capability' can be defined as a military capability for fighting all-out wars or limited wars. Whether we can and should support a dual capability, however, becomes a real economic issue only if we desire different kinds of forces to fight these different kinds of war. If, in accord with the definition given for this seminar, we limit war by constraining only its objectives, area of combat, and resource commitment, the same strategic airpower that is our main deterrent to all-out war can be militarily effective in fighting limited wars. A small strategic bomber force could be diverted quickly to fight in a war so limited, and its attrition at the hands of the enemy would probably be negligible if used in areas not covered by the Soviet air defense network. It need not remain vulnerably based in exposed forward

areas, and, most important, its use need not detract from our general deterrent power. The decision to use such a force would itself be the signal to bring the remainder of our strategic force to a higher state of alert, so raising our retaliatory capability.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422572

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON NONLINEAR DIFFERENTIAL EQUATIONS, THE MAXIMUM OPERATION, AND MONOTONE CONVERGENCE,

Personal Author(s):

Kalaba,Robert

Report Date:

01 Nov 1957

Media Count:

94 Page(s)

Report Number(s):

P1163

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606360

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DESIGN CHANGE IMPACTS ON AIRFRAME PARTS INVENTORIES,

Personal Author(s):

Petersen,James W

Steger,Wilbur

Report Date:

31 Oct 1957

Media Count:

3 Page(s)

Report Number(s):

P-1055 rev.

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This study is an attempt to provide part of the information needed to assess the costs of holding a spares inventory, namely, the cost of airframe inventory which becomes obsolete as a result of design changes. Such information, for example, would be extremely useful in determining a suitable spares procurement policy for a new military weapon.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606277

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON INEQUALITIES FOR DIFFERENTIAL OPERATORS,

Personal Author(s):

Bellman,Richard

Report Date:

28 Oct 1957

Media Count:

11 Page(s)

Report Number(s):

P-1207

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper the following problem was studied: Given that certain functionals of u and its derivatives belong to given L-classes over the infinite interval, what can be said about the L-classes of other functionals. Utilizing a simple device from the theory of linear differential equations, results were obtained due to Landau, Kolmogoroff, Halperin-von Neumann, and Nagy, together with some extensions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606271

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WEIGHTED PCM,

Personal Author(s):

Bedrosian,Edward

Report Date:

28 Oct 1957

Media Count:

3 Page(s)

Report Number(s):

P-1200

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A modified form of pulse-code-modulation, called weighted PCM, is described wherein the relative amplitudes of the pulses within the pulse code groups are adjusted in such a fashion as to minimize the noise power in the reconstructed signal due to errors in transmission. A performance analysis shows the

knee of the output signal to-noise ratio curve to be moved 1.4 db to the left for a weighted 7-digit PCM system while an information-rate study reveals that the maximum improvement over a conventional 7-digit PCM system, which can ever be achieved by any encoding process, is only 8 db. The importance of selecting a suitable system-worth criterion is emphasized by showing that weighting increases the information rate relative to an RMS-fidelity criterion but decreases it on a pure equivocation basis.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606587

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS. VOLUME 25,

Personal Author(s):

Hastings,Cecil ,Jr

Hastings,Elaine

Report Date:

28 Oct 1957

Media Count:

2 Page(s)

Report Number(s):

P-121208

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of chi-square integrals are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606275

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMUM LINEAR ESTIMATION FOR RANDOM PROCESSES AS THE LIMIT OF ESTIMATES BASED ON
SAMPLED DATA,

Personal Author(s):

Swerling, Peter

Report Date:

24 Oct 1957

Media Count:

8 Page(s)

Report Number(s):

P-1206

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A generalized form of the problem of optimum linear filtering and prediction for random processes is considered. It is shown that, under very general conditions, the optimum linear estimation based on the received signal, observed continuously for a finite interval is the limit of optimum linear estimation based on sampled data. This yields a method for obtaining the optimum linear estimation in cases where the conventional generalized Wiener-Hopf integral equation technique has not been shown to yield a solution. The relationship between the sampled-data solution and the Wiener-Hopf integral equation solution is discussed. A problem is posed concerning the rate at which the error variance of optimum sampled-data estimates approaches the error variance of the optimum estimate based on continuous observation, as the sampled points become denser in the observation interval. This problem is solved in one case.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606273

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SYSTEMS RESEARCH LABORATORY'S AIR DEFENSE EXPERIMENTS,

Personal Author(s):

Biel,W C

Chapman,R L

Kennedy,J L

Newell,A

Report Date:

23 Oct 1957

Media Count:

51 Page(s)

Report Number(s):

P-1202

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The desired performance of complex systems can be realized only through designing and managing them for operational flexibility. This can be done by harnessing the learning ability of men in organizations. Conditions for encouraging men to adapt system's resources to most efficient use follow from the organism analogy--a key notion for explaining the behavior of the four crews studied. In addition, the simulation techniques developed in the course of the research provide a means for continued 'head-on' attacks on a crucial problem of the present day--that of better understanding of the adaptation process in organizations, so that it can be used and controlled. The paper is in the form of a report of a scientific search. The story of experimental mistakes, modifications in method, and successive insights is presented to convey the essence of an ambitious investigation at the frontier of knowledge where the terrain is not well-mapped and the research tools are being developed as needed.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606457

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COMPLETE SOLUTION FOR AN ELASTIC HALFSPACE UNDER A POINT STEP LOAD,

Personal Author(s):

LANG,H A

Report Date:

23 Oct 1957

Media Count:

34 Page(s)

Report Number(s):

P-1141

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem of the dynamic response of an elastic halfspace to a unit step load is continued by extending the method developed by the author in a previous paper to include the phenomena of total reflection and Rayleigh surface waves. Confirmation of the method is provided by developing the displacement potentials everywhere in the half-space and showing that, for Poisson's ratio = $1/4$, the surface displacements agree identically with the equations of Pekeris. The boundary condition of vanishing surface stress is also verified. The potentials and displacements, expressed in integral form, represent the complete solution of the problem. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606534

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MASER: A NEW TYPE MOLECULAR AMPLIFIER FOR MICROWAVE RADIATION,

Personal Author(s):

CULVER,W H

Report Date:

18 Oct 1957

Media Count:

22 Page(s)

Report Number(s):

P-1171

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The principle of operation of the maser is presented. A number of masers which have been built or proposed are investigated. These include the molecularucular beam maser, the negative temperature maser, the optically pumped maser, and the solid state maser.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606272

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SEQUENTIAL DECISION PROBLEMS WITH A LIMITED MEMORY,

Personal Author(s):

Marcus,M B

Report Date:

17 Oct 1957

Media Count:

16 Page(s)

Report Number(s):

P-1201

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606451

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CASINO THAT TAKES A PERCENTAGE AND WHAT YOU CAN DO ABOUT IT,

Personal Author(s):

Savage, Leonard J

Report Date:

17 Oct 1957

Media Count:

17 Page(s)

Report Number(s):

P-1132

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) If the casino's cut is at least 100 gamma %, then the probability of running a fortune up to t times its original value is less than $1 - ((t - 1)/t)$ to the 1-gamma power, but it can sometimes be nearly that much.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606586

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FEDERAL SPENDING FOR NATIONAL SECURITY,

Personal Author(s):

Novick,David

Report Date:

10 Oct 1957

Media Count:

17 Page(s)

Report Number(s):

P-1197

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Seven factors which can be expected to influence current and future trends in Federal spending for national security purposes are listed and discussed. The list is illustrative rather than exhaustive, but it is sufficiently complete to show that the level of expenditures is determined by a wide variety of causal factors.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604514

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON COMMUNICATION PROCESSES INVOLVING LEARNING AND RANDOM DURATION,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Report Date:

08 Oct 1957

Media Count:

6 Page(s)

Report Number(s):

P-1194A

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The fundamental problem of determining the utility of a communication channel in conveying information is viewed as a problem within the framework of multistage decision processes of stochastic type, and as such is treated by the theory of dynamic programming. The relations between utility and capacity, in Shannon's sense, are indicated. Treatment of communication problems involving the use of a channel whose properties are not completely known, and those involving processes of random duration, are shown. Treatments of general processes in a uniform fashion by the functional equation technique of dynamic programming are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606547

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROBLEMS IN THE THEORY OF THE FIRM,

Personal Author(s):

Wagner ,H M

Whitin,T M

Report Date:

04 Oct 1957

Media Count:

42 Page(s)

Report Number(s):

P-1191

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper extends the familiar analysis of the theory of the firm to dynamic deterministic situations. A method for obtaining the optimal time profile of production and sales for a firm facing known demand and cost schedules over n periods is discussed. Demand is assumed to be a function of the price charged during the period, and costs include direct manufacturing expenses, inventory holding charges, and fixed or setup costs incurred when period production takes place. The purpose is to frame and solve the problem in terms and with techniques familiar to most economists. From a mathematical point of view, the analysis is another application of dynamic programming type procedures. From a conceptual and computational point of view, the approach heavily rests on standard constructs in economic theory, thus potentially offering added insight into the logic of the solution.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224030

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CONCEPTS OF COST FOR USE IN STUDIES OF EFFECTIVENESS.

Personal Author(s):

Novick, David

Report Date:

04 Oct 1957

Media Count:

14 Page(s)

Report Number(s):

P1182

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606584

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NEW APPROACH TO THE KOLMOGOROV-SMIRNOV DISTRIBUTIONS,

Personal Author(s):

Darling,D A

Report Date:

04 Oct 1957

Media Count:

29 Page(s)

Report Number(s):

P-1192

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The present approach is based on a combination firstly of the observation that the empirical distribution function of a sample of data is merely a scaled and normalized Poisson process, and secondly of certain analytical methods which have been developed in the past few years for calculating the distribution of certain additive functionals of Markov processes. In general the methods in this paper isolate the analytical difficulties in certain functional equations whose solution may be very difficult; but it seems quite powerful in obtaining asymptotic expansions.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606546

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THEORY OF THE SOLAR AUREOLE. PART I. SCATTERING AND RADIATIVE TRANSFER,

Personal Author(s):

Deirmendjian,Diran

Report Date:

03 Oct 1957

Media Count:

40 Page(s)

Report Number(s):

P-1190

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theory of the clear sky aureole around the sun is discussed as a problem of radiative transfer in a planeparallel, scattering atmosphere containing two types of particles: molecules characterized by the symmetrical Rayleigh scattering and a few larger spherical dielectric particles characterized by a highly asymmetrical, forward scattering pattern. For a single scattering process of the latter type, the classical series solution of G. Mie is replaced by the approximation proposed by D. S. Saxon making use of an integral representation of the amplitude of the scattered electromagnetic wave. After verifying the high degree of approximation thus obtained to the exact scattering pattern near the forward direction, it is shown how it can be used in the equation of radiative transfer for a turbid atmosphere, as formulated by Z. Sekera, in evaluating the effects of turbidity on the theoretical skylight corresponding to a Rayleigh atmosphere. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606544

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A FEASIBILITY CRITERION FOR STAIRCASE TRANSPORTATION PROBLEMS AND AN APPLICATION TO A SCHEDULING PROBLEM,

Personal Author(s):

Fulkerson,D R

Report Date:

02 Oct 1957

Media Count:

18 Page(s)

Report Number(s):

P-1188

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A feasibility criterion for transportation problems in which certain variables are inadmissible is shown to yield a simple feasibility test for such problems when the admissible set has the form of a staircase. A simple rule is then presented for singling out a feasible solution for staircase problems. As an application of these results, it is shown that a particular case of the problem of minimizing the number of carriers to meet a fixed schedule can be solved explicitly by an appropriate interpretation of the staircase rule. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606444

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IONOSPHERIC ELECTRIC CURRENT-SYSTEMS DERIVED USING INTERNATIONAL POLAR YEAR DATA,

Personal Author(s):

Vestine,E H

Nagata,T

Report Date:

01 Oct 1957

Media Count:

11 Page(s)

Report Number(s):

P-1121

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper summarizes something of the present state of knowledge of the electric current-systems flowing within the upper atmosphere. It is intended to supplement the accounts on the general subject of geomagnetic observations made during the Second International Polar Year, 1932-1933.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606541

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS; VOLUME 24,

Personal Author(s):

Hastings,Ceil ,Jr

Hastings,Elaine

Report Date:

27 Sep 1957

Media Count:

6 Page(s)

Report Number(s):

P-1184

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of chi-square integrals are prerresented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606542

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A METHOD OF COMPUTING THE INHERENT ACCURACY WITH WHICH A TIME DELAY CAN BE ESTIMATED,

Personal Author(s):

Swerling,P

Report Date:

27 Sep 1957

Media Count:

8 Page(s)

Report Number(s):

P-1185

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Results in the theory of statistical estimation, concerning the greatest lower bound for the variance of unbiased estimators, provide an approach to the problem of calculating the limits of accuracy with which a time delay between transmission and reception of a waveform can be estimated. First, a summary is given of the requisite results from estimation theory. Certain functions, necessary for the application of these results to the case of time delay estimation, are evaluated, assuming the received waveform to be observed against a background of additive Gaussian white noise. A brief discussion is given of points wherein this method may offer advantages over (a) Woodward's approach to the same problem, and (b) an approach based on the inequality of Cramer-Rao. An explicit asymptotic expression is calculated for the minimum error variance of unbiased estimates of time delay, for the case where the a-priori range of possible time delays is large. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606379

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE DETERMINATION OF CHARACTERISTIC VALUES FOR A CLASS OF STURM-LIOUVILLE PROBLEMS,

Personal Author(s):

Bellman, Richard

Report Date:

19 Sep 1957

Media Count:

1 Page(s)

Report Number(s):

P-1082

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper is presented a new method for obtaining the characteristic values of the Sturm-Liouville problem $u' + \lambda a(t)u = 0$, $u(0) = u(1) = 0$. The method yields upper and lower bounds and is particularly suitable for problems in which the first and second characteristic values are desired to a high degree of accuracy. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606537

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING, SUCCESSIVE APPROXIMATIONS AND VARIATIONAL PROBLEMS OF COMBINATORIAL NATURE,

Personal Author(s):

Bellman, Richard

Report Date:

13 Sep 1957

Media Count:

8 Page(s)

Report Number(s):

P-1175

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper shows that a combination of dynamic programming and the classical method of successive approximations permits a systematic study of various classes of combinatorial problems arising in scheduling theory, communication theory and network theory. Although the method cannot guarantee convergence to the actual solution, it furnishes a monotonic sequence of approximations by means of approximation in policy space. An important feature of the method is the use of the solution of sub-problems of considerable magnitude as steps in the approximation procedure. With the aid of digital computers and the techniques of dynamic programming, this is a feasible method. The Hitchcock-Koopmans transportation problem, an allocation problem, and the travelling salesman problem are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606462

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND MEAN SQUARE DEVIATION,

Personal Author(s):

Bellman, Richard

Report Date:

13 Sep 1957

Media Count:

9 Page(s)

Report Number(s):

P-1147

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some applications are given of the functional equation technique of dynamic programming to the treatment of some quadratic variational problems and the linear equations arising therefrom.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605092

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A FEASIBILITY ALGORITHM FOR ONE-WAY SUBSTITUTION IN PROCESS ANALYSIS,

Personal Author(s):

Arrow, Kenneth J

Johnson, Selmer M

Report Date:

12 Sep 1957

Media Count:

10 Page(s)

Report Number(s):

P-941

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A certain number of machines are available, not all of the same capability, with which to do a certain number of tasks, varying in difficulty. On the assumption that it is better to use a more capable machine for a more difficult task, an algorithm is given for the most efficient assignment of machines to tasks. It is shown that the algorithm solves an equivalent linear programming problem. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606535

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE HIGH SPEED FLOW OF GAS AROUND BLUNT BODIES,

Personal Author(s):

Serbin,Hyman

Report Date:

11 Sep 1957

Media Count:

40 Page(s)

Report Number(s):

P-1172

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A number of results derived on the flow of air around blunt bodies moving at high speed are presented in a unified analysis. The theory predicts in a satisfactory way the shock shape and detachment distance for two blunt bodies, a flat disk, and a sphere. It is shown that the density ratio across a normal shock is a useful parameter combining the effects of both the free stream Mach number and the ratio of specific heats. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606099

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ASYMPTOTIC EXPANSION FOR INHOMOGENEOUS MARKOV CHAINS,

Personal Author(s):

Statulyavichus,V A

Report Date:

09 Sep 1957

Media Count:

1 Page(s)

Report Number(s):

T-75

TT-64 71438

Monitor Series:

64 71438

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An inhomogeneous Markov chain with a finite number s of possible states e_1, \dots, e_s and transition probabilities $p_{\alpha\beta}(k)$ from state e_α on the $(k-1)$ -st step to state e_β on the k -th step is studied.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606532

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DOES EFFICIENT PEAK-LOAD PRICING INVOLVE DISCRIMINATION,

Personal Author(s):

Hirshleifer,Jack

Report Date:

09 Sep 1957

Media Count:

14 Page(s)

Report Number(s):

P-1169-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is contended that the efficient price differences in a peak-load situation shown in Steiner's analysis are not discriminatory because they are e ere equal to the differences in the marginal cost of serving the classesessasses of customers involved. By marginal cost is meant, ultimately, the marginal opportunity cost--the value set upon the resource by the customer in the most valuable alternative use being sacrificed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606533

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ISRAEL'S NATIONAL EXPENDITURE: SUMMARY OF RESULTS,

Personal Author(s):

Lubell,Harold

Report Date:

09 Sep 1957

Media Count:

48 Page(s)

Report Number(s):

P-1170

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The gross national product estimates in this report are examined from two points of view: as an indicator of national welfare, by determining levels of output at any given time and, more important, evaluating changes in output over time; and as a means of measuring the allocation of national resources. Both these aspects are of interest for Israel in its efforts to deal with its threefold problem of maintaining an adequate standard of living for a population which is rapidly increasing through immigration, meeting an acute external security threat, and reducing (or, hopefully, eliminating) dependence on foreign economic aid by increasing domestic output.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606452

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING, NONLINEAR VARIATIONAL PROCESSES, AND SUCCESSIVE APPROXIMATIONS,

Personal Author(s):

Bellman, Richard

Report Date:

06 Sep 1957

Media Count:

8 Page(s)

Report Number(s):

P-1133

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The object of the paper is to show that a blend of dynamic programming, successive approximations and digital computers enables one to approach various classes of nonlinear variational problems formerly far beyond reach.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606528

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EXISTENCE OF CONSERVATION LAWS, I.,

Personal Author(s):

Osborn,Howard

Report Date:

03 Sep 1957

Media Count:

30 Page(s)

Report Number(s):

P-1164

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) For certain linear transformations of the Pfaffian forms at each point of a neighborhood of an analytic manifold, a construction is given of all the locally exact forms whose image is also locally exact.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606455

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTERCONTINENTAL MILITARY AIR TRANSPORT: AN APPLICATION OF A MODEL FOR THE STUDY OF AIRCRAFT PROCUREMENT POLICIES,

Personal Author(s):

McGuire,C B

Report Date:

30 Aug 1957

Media Count:

61 Page(s)

Report Number(s):

P-1138

Monitor Series:

9A

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606436

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PHYSICAL BASIS FOR FORECASTING THE PRESSURE AND HORIZONTAL WIND FIELDS IN THE LOWER STRATOSPHERE,

Personal Author(s):

Knox,Joseph B

Report Date:

29 Aug 1957

Media Count:

10 Page(s)

Report Number(s):

P-1108

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theory of the one-parameter model with flat terrain is outlined. The physical basis of the direct method of predicting the horizontal wind field is discussed briefly. (L.T.W.)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606527

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STATISTICAL DECISION THEORY AS A GUIDE TO INFORMATION PROCESSING,

Personal Author(s):

Wagner,Harvey M

Report Date:

26 Aug 1957

Media Count:

30 Page(s)

Report Number(s):

P-1160

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The advance which decision theory makes over previous methods in mathematical statistics is that the economic consequences of an action are explicitly taken into account. In other words, the theory goes beyond statements about probabilities of making various errors, and incorporates both the relative losses from such errors as well as the costs of processing information in order to reduce the likelihood of mistakes. One important consequence claimed by decision theorists is that by such analysis it is possible to unify various subfields in statistics into a single conceptual framework.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606526

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ISOQUANT APPROACH TO INVESTMENT DECISION PROBLEMS.

Personal Author(s):

Hirshleifer,Jack

Report Date:

23 Aug 1957

Media Count:

46 Page(s)

Report Number(s):

P-1158

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The given notes constitute an attempt to solve, through the use of isoquant analysis, the problem of optimal investment decisions (in business parlance, the problem of capital budgeting). The initial section reviews the principles laid down in Irving Fisher's justly famous works on interest, to see what light they shed on two competing rules of behavior currently proposed by economists to guide business investment decisions--the Present-Value Rule and the Internal-Rate-of-Return Rule. The main concern is to show how Fisher's principles must be adapted when the perfect capital market assumed by Fisher in his analysis does not exist--in particular, when the borrowing and lending rates diverge, when capital can be secured at an increasing marginal borrowing rate, and when capital is 'rationed'. Finally, an error by Fisher in his treatment of multi-period investments which has been the source of much difficulty is corrected. In doing so, support is given the contentions of those who reject the internal rate of return as an investment criterion, showing more clearly, it is believed where the error lies and how the internal rate would have to be redefined if it is to be used as a reliable guide.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606588

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE INTENSE STRESS FIELD PRODUCED IN THE ELASTIC EARTH BY A BOMB BLAST AT THE SURFACE,

Personal Author(s):

Serbin,Hyman

Report Date:

23 Aug 1957

Media Count:

32 Page(s)

Report Number(s):

P-1210

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A theory for the free stress field in the earth developed by a bomb blast at the surface is presented. The theory is based on the assumption that the earth is an elastic solid. The analysis is confined to the intense stress field developed shortly after the burst. Stresses and displacements are calculated in explicit form and can be compared with test data when such is available. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606536

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AXISYMMETRIC WAVE FIELDS.

Descriptive Note:

Progress rept.,

Personal Author(s):

LANG,H A

Report Date:

20 Aug 1957

Media Count:

16 Page(s)

Report Number(s):

P-1173

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A new method for the solution of wave propagation problems is applied to axisymmetric wave fields.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606461

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) KHRUSHCHEV AS SENIOR SECRETARY: HIS RISE AND HIS AMBITIONS,

Personal Author(s):

Rush,Myron

Report Date:

16 Aug 1957

Media Count:

14 Page(s)

Report Number(s):

P-1146

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Evidence is presented to show that Khrushchev not only sought to magnify his authority as senior secretary, but even tried to establish himself as Stalin's rightful successor. His goal was to achieve powers like those of Stalin in 1930. In this light, the results of the 'June days' were nothing adventitious, but an end brought about by the designs of Khrushchev.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606524

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DO DISPARITIES BETWEEN REAL AND MONEY PRICES MODIFY TRADITIONAL ARGUMENTS FOR FREER TRADE.

Personal Author(s):

Enke,Stephen

Report Date:

15 Aug 1957

Media Count:

44 Page(s)

Report Number(s):

P-1154

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the mid-20th century real costs are often not reflected by money costs, or real benefits by money gains. The main cause of these discrepancies is the intervention in price making of governments, large corporations, labor unions, etc. As a consequence, it is sometimes alleged that the economic efficiency that is supposed to flow from policies of freer trade cannot be relied upon in the world of today. However, it can be shown that, from the selfish viewpoint of a single country, the existence of discrepancies abroad between money and real costs and gains in no way modifies traditional arguments for free trade. Moreover, for a country like the United States, which has full employment, a strong current account, and a highly mobile labor force, it can be shown that import restrictions are usually not the answer when real values and money prices are disproportionate at home. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606525

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND THE COMPUTATIONAL SOLUTION OF FEEDBACK DESIGN CONTROL PROBLEMS,

Personal Author(s):

Bellman, Richard

Report Date:

15 Aug 1957

Media Count:

28 Page(s)

Report Number(s):

P-1155

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper indicates how a class of control processes requiring multi-dimensional sequences of functions when treated by the direct methods of dynamic programming can, by means of a transformation familiar to the theory of linear functional equations of differential, difference, or differential-difference type, be reduced to problems involving sequences of functions of one variable in a number of cases, and sequences of functions of two variables in others. These results open the door to a systematic study of nonlinear control processes, with or without time-lags and other types of hereditary behavior, by way of the method of successive approximations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606031

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE PROBLEM OF A STREAMLINED PROFILE IN A NEAR-SONIC FLOW,

Personal Author(s):

Kryuchin,A F

Report Date:

15 Aug 1957

Media Count:

8 Page(s)

Report Number(s):

T-76

TT-64 71432

Monitor Series:

64 71432

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A study was made of a steady near sonic flow of gas in the absence of friction and heat transfer. As an example, a streamlined wedge was studied with a detached shock wave with the assumption that the velocity of the stream slightly exceeds the velocity of sound at infinity and the wedge has a small included angle. As a result of numerical calculations, the distribution of pressure over the profile, the location and shape of the shock wave and the equations of the sonic line are found.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606467

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE NON-NEGATIVITY OF SOLUTIONS OF THE HEAT EQUATION,N,

Personal Author(s):

Bellman,Richard

Report Date:

12 Aug 1957

Media Count:

3 Page(s)

Report Number(s):

P-1153

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that non-negativity of the solution of the heat equation, given non-negative initial values, and suitable boundary conditions, can be established quite readily once the existence of a solution of the equation depending continuously upon the initial values was demonstrated. It is shown that this property is trivially true for the solution of the appropriate finite difference approximation to the partial differential equation, and that the convergence of the solution of the finite difference equation to the solution of the original equation is quite simple, under the above conditions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606466

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE ESTIMATION OF THE KLOOSTERMAN SUM,

Personal Author(s):

Anderson,D R

Report Date:

07 Aug 1957

Media Count:

12 Page(s)

Report Number(s):

P-1152

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Kloosterman sum $K(m \text{ sub } 1, m \text{ sub } 2; n)$ is considered in the case where n is a prime. An estimate is obtained by using a method of Mordell to express the sum in terms of contour integrals which are in turn put into an accessible form by analytic continuation and use of the Mellin Transform.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

ADD503946

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RADAR CAMOUFLAGE (U) - PROJECT RAND RESEARCH MEMORANDUM

Personal Author(s):

HOFFMAN,W C

Report Date:

07 Aug 1957

Media Count:

43 Page(s)

Report Number(s):

RM-1838

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

NL, AIR FORCE

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606463

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME NEW TECHNIQUES IN THE DYNAMIC PROGRAMMING SOLUTION OF VARIATIONAL PROBLEMS,

Personal Author(s):

Bellman, Richard

Report Date:

06 Aug 1957

Media Count:

2 Page(s)

Report Number(s):

P-1148

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It was seen that the numerical solution of a problem involving N state variables depended upon the computation of sequences of functions of N variables. This fact made the method routine only for the case where $N = 1$ or 2 , with grave difficulties arising in the general case. In the paper, it is indicated how to overcome this difficulty for a large class of problems in which the underlying equations and the criterion function are linear, although the restraints on the forcing functions may be nonlinear, corresponding say to energy considerations. Finally, it is briefly indicated how the method of successive approximations may be combined with the foregoing techniques to reduce general variational problems, in which the equations and criterion function are nonlinear, to sequences of problems which can be solved numerically by means of sequences of functions of one variable. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606464

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND THE VARIATION OF GREEN'S FUNCTIONS,

Personal Author(s):

Bellman, Richard

Osborn, Howard

Report Date:

06 Aug 1957

Media Count:

10 Page(s)

Report Number(s):

P-1150

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The functional equation technique of dynamic programming is applied to the study of quadratic functionals whose Euler variational equations are linear self-adjoint partial differential equations of the second order. A first consequence is the classical Hadamard variational formula for the Green's function of a region. Some extensions are indicated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606460

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DIGITAL COMPUTER PROGRAMMING; A BOOK REVIEW,

Personal Author(s):

Baker,Charles L

Report Date:

05 Aug 1957

Media Count:

3 Page(s)

Report Number(s):

P-1145

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A book review is presented which covers the book chapter by chapter and, in general, points up some of the short comings from the point of view of a neophyte in coding. A few remarks on the general philosophy of the book, which is described as an excellent introduction to the problems of coding for a high speed stored program computer, are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606529

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MONTE CARLO,

Personal Author(s):

Kahn,Herman

Mann,Irwin

Report Date:

30 Jul 1957

Media Count:

30 Page(s)

Report Number(s):

P-1165

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606531

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WAR GAMING,

Personal Author(s):

Kahn,Herman

Mann,Irwin

Report Date:

30 Jul 1957

Media Count:

14 Page(s)

Report Number(s):

P-1167

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An introduction to the basic principles of war gaming covering the following topics: The informal game, rule games, the formal minimum rule game, and realistic war games.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606530

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GAME THEORY,

Personal Author(s):

Kahn,Herman

Mann,Irwin

Report Date:

30 Jul 1957

Media Count:

68 Page(s)

Report Number(s):

P-1166

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An introduction to the principles of game theory is presented through the following examples and discussions: matching pennies, modified matching game, a game of ruin, noisy duel, silent duel, some definitions and formal results, attacking targets of unequal importance, the trader and the cannibal, two-person non-zero sum games, n-person games (the princess and her three suitors, the bankruptcy court, a pure coalition game, the community of Shangri-La, games of deterrence).

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606453

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTEERNATIONAL REGISTRATION OF THE ATOM,

Personal Author(s):

Kramish,Arnold

Report Date:

26 Jul 1957

Media Count:

10 Page(s)

Report Number(s):

P-1134

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The discussion is centered around the following question: In view of the Universal Declaration of Human Rights which proclaims the individual's 'right to life, liberty and security of person,' is it not within the province of the United Nations to enunciate the following principle. 'That nations and individuals engaged in nuclear research and development operations of any sort have an obligation to do so at minimum risk to other nations and to the individuals of all nations. Further, it is the common right to know of any such operations which possess a potential of harm or could conceivably magnify themselves to a stage dangerous to individual life and security.' On the whole, the last decade has shown a discouraging lack of progress in disarmament negotiations. This is due, in large measure, to the comprehensive, sweeping nature of the plans submitted. And if we are now beginning to make any progress in this field, it is because emphasis has been changed to the achievement of step-by-step goals. But the final goal, disarmament in its absolute sense, may never be achieved--the common goal must be the disciplined manufacture and use of armaments.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606456

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMMENTARY ON FIRE RESEARCH, BASED ON THE MASS FIRE STUDY GROUP CONFERENCE, THE UNIVERSITY OF CALIFORNIA AT LOS ANGELES (MAY 26-28, 1957),

Personal Author(s):

DeHaven,James C

Report Date:

24 Jul 1957

Media Count:

11 Page(s)

Report Number(s):

P-114ORC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A commentary on the Conference suggesting research which might usefully be undertaken based on the description and discussion of hostile fires presented by the practical fire fighters.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606454

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) KHRUSHCHEV AND THE POLITICAL CRISIS OF JUNE, 1957,

Personal Author(s):

Rush, Myron

Report Date:

23 Jul 1957

Media Count:

55 Page(s)

Report Number(s):

P-1135

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Communist party apparatus -- the men engaged in administering party affairs and in imposing its will upon the other institutions of Soviet society -- has been strengthened by each of Khrushchev's victories since mid-1953. In the June days, when Khrushchev achieved his greatest triumph, the party apparatus acquired an authority in Soviet society which it had not possessed for perhaps a quarter of a century. Representatives of the party apparatus, sixteen of its most powerful secretaries, were elected to two-thirds of all the places on the Khrushchev-dominated Presidium, although in Stalin's time they had not occupied more than half the Politburo seats. It seems clear that the plot of the 'anti-party group' was conceived in desperation to protect the remnants of their power against the incipient dictator, although the dimensions of their plot, and its details, remain obscure.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0133035

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TEN COMMON PITFALLS

Personal Author(s):

KAHN, HERMAN

MANN, IRWIN

Report Date:

17 Jul 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606435

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GERMAN DISCUSSION OF ATOMIC WEAPONS AND THE LAW,

Personal Author(s):

Schnitzer,Ewald W

Report Date:

17 Jul 1957

Media Count:

10 Page(s)

Report Number(s):

P-1106

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The subject of atomic armament for the Bundeswehr, the newly established armed forces of West Germany is discussed. For the first time the question of the relationship between atomic weapons and the law has been discussed in the German press. On May 18, 1957, a letter to the editor was published in Frankfurter Allgemeine Zeitung under the heading 'Atomic Weapons and the Law'. The letter is reproduced in translation. Although it furnishes only scant material on the subject, it does present a first definition of the problem, and deals with an issue which may have farreaching political implications.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606447

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPARISON OF AMERICAN ROTARY ELECTRIC DESK CALCULATORS,

Personal Author(s):

Gruenberger,Fred J

Report Date:

15 Jul 1957

Media Count:

2 Page(s)

Report Number(s):

P-1-1124

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The current comparable models of the Friden, Marchant, and Monroe desk calculators are contrasted and analyzed and their relative advantages and disadvantages are listed. Attention is drawn to those features which tend to make the machines non-interchangeable. The survey was conducted with the cooperation of the local salesmen of the three firms. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606352

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON THE SOCIOLOGY OF MANAGEMENT,

Personal Author(s):

Hays,David G

Report Date:

11 Jul 1957

Media Count:

1 Page(s)

Report Number(s):

P1043

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Five functions of management are: planning, organizing, staffing, directing, and controlling. Managers perform these functions by manipulating the organizations which sociologists study; hence, the sociologist should be a useful aide to the manager. Automation raises problems which illustrate the relationship: problems of changing authority and career lines, and problems of human judgment.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606446

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LINEAR PROGRAMMING AND STRUCTURAL DESIGN; II: LIMIT DESIGN,

Personal Author(s):

Prager, William

Report Date:

11 Jul 1957

Media Count:

10 Page(s)

Report Number(s):

P-1123

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Abstract:

(U) 'Limit Design' guides the structural engineer towards an economic design of structures that are made of ductile materials and have to carry specified loads. From the mathematical point of view, the problem can be reduced to one in linear programming, but even simple structures may lead to linear programming problems of considerable size. A method of solution is discussed that was found efficient

for structures of moderate complexity. A sketch of the historical development of limit analysis and design is given. (Authhor)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606450

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTELLECTUAL UNREST BEHIND THE IRON CURTAIN,

Personal Author(s):

Kecskemeti,Paul

Report Date:

11 Jul 1957

Media Count:

1 Page(s)

Report Number(s):

P-1127

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) There is ferment among the intellectuals behind the Iron Curtain. It manifested itself most dramatically in Poland and Hungary where a full-fledged literature of rebellion emerged last year, but in Soviet Russia, too, the symptoms of nonconformism among the literati are unmistakeable. The political background and significance of this phenomenon are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606261

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONTINUOUS PRODUCTION AND EMERGENT DEMAND,

Personal Author(s):

GOLDMAN,T A

Report Date:

09 Jul 1957

Media Count:

13 Page(s)

Report Number(s):

P-1010

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A model of the real and monetary costs involved in supplying spare parts from current production is presented. The model leads to a cost function for each part individually depending on its production characteristics and its demand probability function, and on certain policy variables. By choosing appropriate values for the policy variables, the cost function for each part can be minimized independently of the others.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606448

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE REPRESENTATION OF THE SOLUTION OF A CLASS OF STOCHASTIC DIFFERENTIAL EQUATIONS,

Personal Author(s):

Bellman,Richard

Report Date:

09 Jul 1957

Media Count:

2 Page(s)

Report Number(s):

P-1125

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion is given of a representation of the distribution function of the solution of the stochastic differential equation $u' = g(u) + r(t)$, where $r(t)$ is a given stochastic function, and $g(u)$ is assumed to be either strictly convex or strictly concave for all u . Extensions of this result to more general types of nonlinear functional equations may be readily obtained. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606443

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/606443.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD606443>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) IMPLICATIONS OF NUCLEAR WEAPONS IN TOTAL WAR

Personal Author(s):

Brodie, Bernard

Report Date:

08 Jul 1957

Media Count:

35 Page(s)

Report Number(s):

P-1118

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Abstract:

(U) The discussion on total nuclear warfare concludes: ' . . . Barring revolutionary and presently unforeseen advances in air defense, an unrestricted strategic air campaign in a war in which the United States is engaged is bound to be decisive. It does not matter greatly whether the number of nuclear weapons-on-target required to guarantee decisiveness is a few score or a few hundred, because we are in realms of figures that are well within the capabilities at least of the United States (the critical factor being, of course, delivery capability rather than size of the nuclear stockpile). And it is equally certain that these figures are now or soon will be within the capabilities of one or more other powers. Figures for a strategic-bombing campaign running into the thousands of bombs-on-target are likely to be either morbidly fanciful or pointed toward a campaign aimed not merely at a simple military decision but at complete national obliteration.'

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0133013

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET AGRICULTURAL MARKETING AND PRICES, 1928-1954,

Descriptive Note:

Research memo.,

Personal Author(s):

Karcz, Jerzy F

Report Date:

02 Jul 1957

Media Count:

504 Page(s)

Report Number(s):

RM-1930

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The main purpose of this study is to present index numbers of Soviet agricultural prices for selected years in the period 1928-1954. Over most of this period an agricultural commodity was likely to be procured by the central government or local agencies at two or more controlled prices, and sold on the free market at still another price. In order to obtain an average realized farm price, the value of all marketings (including payments in kind valued at Soviet accounting prices) is divided by the total quantity marketed. Alternative index numbers are also computed for the average prices actually received by peasant producers (excluding accounting prices). For the period 1928-1937, the data on agricultural marketings and prices are relatively abundant. During this period, average realized farm prices increased about six-fold. For the period 1937-1954, the available data are much more scanty; what information there is suggests that average realized farm prices increased during this period by two and one-half times. A comparison is made of prices received by the farmer or peasant with the prices he must pay for retail goods and services. In 1937, it appears that the peasant's terms of trade were only 70 or 80 per cent as favorable as in 1928; however, from 1937 to 1954, it appears that his terms of trade improved by about 40 per cent. This comparison suggests that relative to the city worker, the peasant is as well off now as he was in 1928. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606442

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOLUME 23,

Personal Author(s):

Hastings,Cecil ,Jr

Hastings,Elaine

Report Date:

28 Jun 1957

Media Count:

3 Page(s)

Report Number(s):

P-1117

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of chi-square integrals are presented in tabular form.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606439

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RANDOM WALK, SCATTERING AND INVARIANT IMBEDDING. I: ONE-DIMENSIONAL DISCRETE CASE,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Report Date:

27 Jun 1957

Media Count:

9 Page(s)

Report Number(s):

P-1113

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper, a new method was introduced of treating problems involving random walk processes, based upon the principle of invariant imbedding which were introduced and applied in previous papers. Since scattering processes can often be formulated in terms of random walk, a new method of treating scattering processes was found.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606445

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LINEAR PROGRAMMING AND STRUCTURAL DESIGN. I. LIMIT ANALYSIS,

Personal Author(s):

Prager, William

Report Date:

26 Jun 1957

Media Count:

1118 Page(s)

Report Number(s):

P-1122

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) 'Limit Analysis' provides the structural engineer with a realistic estimate of the load carrying capacities of structures that are made of ductile materials. From the mathematical point of view, the problem of limit analysis is one of linear programming. The basic concepts are presented and a practical method of solution is discussed. This is essentially the 'simplex method with prices,' but the various steps are given mechanical interpretations which enable the experienced analyst to capitalize on his intuitive understanding of structural behavior. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0623562

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE OPTIMIZATION OF NOZZLE AREA RATIO FOR ROCKETS OPERATING IN A VACUUM,

Personal Author(s):

Goldsmith,M

Report Date:

26 Jun 1957

Media Count:

15 Page(s)

Report Number(s):

P-1112

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The correct choice of nozzle area ratio should be considered in rocket-powered missiles even when intended to operate at high altitudes, where ambient pressure may be neglected. Under such conditions, specific impulse of the propellant increases monotonically with increasing area ratio (exit area/throat area), but the increased weight of larger nozzles degrades performance. Hence an optimum area ratio can be sought which will provide maximum performance for the stage in question. Gains in stage velocity increment due to correct choice of area ratio are usually only a few percent, which may be of importance in some applications. The investigation resulted in a linearized analytic approach to the problem of calculating the optimum area ratio, and design charts are presented. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605069

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MIN-MAX SOLUTION OF AN INVENTORY PROBLEM,

Personal Author(s):

Scarf,H E

Report Date:

24 Jun 1957

Media Count:

18 Page(s)

Report Number(s):

P-910

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is concerned with the problem of purchasing a quantity of an item in anticipation of a future demand. It is assumed that only the mean and standard deviation of the demand distribution are known. A stock level is found which maximizes the minimum profit for all demand distributions with this mean and standard deviation. This stock level is then compared with the levels obtained by assuming several specific distributions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606100

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME NEW SOVIET MATERIAL ON MISSILES,

Personal Author(s):

DINERSTEIN,Herbert S

Report Date:

20 Jun 1957

Media Count:

26 Page(s)

Report Number(s):

T-73

TT-64 71439

Monitor Series:

64 71439

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This document contains excerpts of recently acquired Soviet published material on missiles. The book from which the material is excerpted contains an explicit Soviet discussion of the expected accuracy of long-range ballistic missiles, their strategic importance, and the ease with which they might be detected.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607598

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONSTRUCTION OF AIRCRAFT: DEALING WITH THE EVOLUTION AND USES OF SOVIET AIRPLANES,

Personal Author(s):

SHUL'ZHENKO,M N

Report Date:

19 Jun 1957

Media Count:

24 Page(s)

Report Number(s):

T-72

TT-64 71622

Monitor Series:
64 71622
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0606431
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON THE PRINCIPLE OF INVARIANT IMBEDDING AND NEUTRON TRANSPORT THEORY; I: ONE-DIMENSIONAL CASE,
Personal Author(s):
Bellman, Richard
Kalaba, Robert
Wing, G Milton
Report Date:
11 Jun 1957
Media Count:
1 Page(s)
Report Number(s):
P-1102
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Consideration is given to a one-dimensional version of the reflection and transmission of neutrons, and the phenomenon of critical mass. Although the effects of fission, capture and forward and backward scattering are considered, collisions between neutrons are not taken into account. The basic model is stochastic, with standard transport theory derived on the basis of expected values. As the explicit form of the higher moments indicates, an expected value theory yields a quite inadequate view of the distribution of reflected and transmitted neutrons in the neighborhood of critical mass. Some numerical

results describing these distributions obtained from the solution of forty simultaneous nonlinear differential equations are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606430

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TERMINAL CONTROL, TIME-LAGS AND DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman, Richard

Report Date:

10 Jun 1957

Media Count:

3 Page(s)

Report Number(s):

P-1101

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606302

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SEASONAL CHANGES IN DAY-TO-DAY VARIABILITY OF UPPER AIR WINDS NEAR THE 100 KM LEVEL OF THE ATMOSPHERE,

Personal Author(s):

Vestine,E H

Report Date:

06 Jun 1957

Media Count:

8 Page(s)

Report Number(s):

P-1040

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The day-to-day differences in ionospheric F-region critical frequencies near noon are studied as a measure of corresponding differences in the wind-generated ionospheric electric field at the magnetic equator. These changes in F-region critical frequencies reflect corresponding changes in height of the F-region, caused by the electric field of the daily variation. It is shown that the daily variation, though proportional to both the electric field and the electric conductivity, is probably a good indicator of day-to-day changes in wind speeds in the E-region. The data do not support the view that the ionizing solar radiation fluctuates much from one day to the next. The day-to-day changes in wind speed indicated for the E-region in middle latitudes are found to be largest in northern winter, and least in northern summer, and are discussed in relation to evidences of variability dependent on season noted from meteorology for tropospheric winds. Changes in wind speed with sunspot cycle are also discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0133012

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TECHNIQUES OF SYSTEMS ANALYSIS

Personal Author(s):

KAHN, H
MANN, I
Report Date:
Jun 1957
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0606306
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) KRONECKER PRODUCTS AND THE SECOND METHOD OF LYAPUNOV,
Personal Author(s):
Bellman, Richard
Report Date:
29 May 1957
Media Count:
9 Page(s)
Report Number(s):
P-1097
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The second method used by Lyapunov to study the stability of the trivial solution of $dx/dt = Ax + f(x)$ leads to the problem of solving the matrix equation $AX + XA' = C$. It is shown that this question is related to Kronecker products and Kronecker sums, and the general problem of solving $AX + XB = C$ is resolved in this fashion. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606387

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS VOLUME 22,

Personal Author(s):

Hastings,Cecil ,Jr

Hastings,Elaine

Report Date:

29 May 1957

Media Count:

3 Page(s)

Report Number(s):

P-1098

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A numerical approximation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606304

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON MATRIX THEORY; XV: MULTIPLICATIVE INEQUALITIES OBTAINED FROM ADDITIVE INEQUALITIES,

Personal Author(s):

Bellman,Richard

Report Date:

27 May 1957

Media Count:

6 Page(s)

Report Number(s):

P-1095

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper, it is shown how multiplicative inequalities for the characteristic values of positive definite matrices can be obtained from additive inequalities. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606371

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE COMPUTATIONAL SOLUTION OF DYNAMICPROGRAMMING PROCESSES. I. ON A TACTICAL AIRWARFARE MODEL ON MENGEL,

Personal Author(s):

Bellman,Richard

Dreyfus,Stuart

Report Date:

23 May 1957

Media Count:

8 Page(s)

Report Number(s):

P-1072

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is devoted to the computational solution of dynamic programming processes. The functional-equation approach is used to treat a tactical air-warfare model that A. Mengel previously considered by means of classical variational techniques. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606386

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE WORTH OF PRINCIPLES OF WAR,

Personal Author(s):

Brodie,B

Report Date:

21 May 1957

Media Count:

3 Page(s)

Report Number(s):

P-1092

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The principles of war are discussed in terms of historical and present day military strategy.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606385

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TOPOPOPOLOGICAL DYNAMICS; A BOOK REVIEW,

Personal Author(s):

Gottschalk,Walter Helbig

Hedlund,Gustav Arnold

Bellman,Richard

Report Date:

20 May 1957

Media Count:

3 Page(s)

Report Number(s):

P-1090

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606384

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELECTRON DENSITY DISTRIBUTION IN A NEW MODEL OF THE IONOSPHERE,

Personal Author(s):

Kallmann,H K

Report Date:

15 May 1957

Media Count:

11 Page(s)

Report Number(s):

P-1089

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this report is to give a brief outline of the theoretical analysis which led to a model of the ionosphere, to present the results which were obtained, and to compare the theoretical results with the direct observations obtained by means of rockets.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606383

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LEGAL TERMINOLOGY FOR THE UPPER REGIONS OF THE ATMOSPHERE AND FOR THE SPACE BEYOND THE ATMOSPHERE,

Personal Author(s):

Hogan, John C

Report Date:

15 May 1957

Media Count:

11 Page(s)

Report Number(s):

P-1088

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) There are no established definitions in law for describing the upper regions of the atmosphere. The urgency of the need for a standard terminology in law for describing these regions and the areas beyond

arises from the fact that there is a variety of man-made objects which will soon be operating at high altitudes--some outside the atmosphere--and these can be expected to present somewhat different legal problems depending upon the heights and speeds at which they fly. Astronautical jurisprudence is a new field of law, and it raises some basic questions which must soon be answered, namely: What, in law, is meant by the term 'airspace'. What are the scientific divisions of the upper regions of the earth's atmosphere. How does 'space' differ from 'outer space', 'world space', 'territorial space', 'contiguous space', 'terrestrial space', etc.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606382

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SPACE LAW BIBLIOGRAPHY,

Personal Author(s):

Hogan,John C

Report Date:

15 May 1957

Media Count:

9 Page(s)

Report Number(s):

P-1087

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Only since the end of World War II has there been a serious interest in the problems of law and activities in the upper atmosphere. Scholarly articles on this subject have been published recently by lawyers in Canada, England, France, Germany, and the USSR, and there are materials in the American law reviews which apply--either directly or by analogy--to man's activities above the surface of the earth. The immediate problem is State sovereignty in the upper atmosphere. Some attention has also been given to the longrange problem of a system of jurisprudence for activities in space.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606437

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME STRATEGIC IMPLICATIONS OF THE NUCLEAR REVOLUTUUTION,

Personal Author(s):

Brodie,Bernard

Report Date:

14 May 1957

Media Count:

2 Page(s)

Report Number(s):

P-1111

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The discussion is concerned with the problems involved in the use of nuclear weapons in limited warfare. The conclusion states: ...'In order to make work at all anything as arbitrary and forced as limitations upon war are likely to be, it would seem that one major requirement is that transgressions or violations be very easy to recognize and very difficult to deny. This is not to say that we may not use nuclear weapons in limited war; it only underlines the problem of finding out how we can use them without thereby signaling the abandonment of restraints.'

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606381

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MULTI-DIMENSIONAL MAXIMIZATION AND DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman, Richard

Report Date:

14 May 1957

Media Count:

2 Page(s)

Report Number(s):

P-1086

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion is given of some of the difficulties arising in multi-dimensional maximization problems and some of the special types of problems which can be treated by dynamic programming techniques. The topic of linear programming is included. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606380

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE VARIATION OF THE FREDHOLM RESOLVENT,

Personal Author(s):

Bellman, Richard

Report Date:

13 May 1957

Media Count:

3 Page(s)

Report Number(s):

P-1084

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper is studied the dependence of the Fredholm resolvent upon the end-points of the interval, and, using the same technique, a formula is derived due to Schiffer concerning the variation of a Green's function upon a parameter. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606265

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GENERALIZED ANALYSIS OF AERIAL CAMPAIGNS AGAINST STRATEGIC TARGETS,

Personal Author(s):

Schamberg,R

Report Date:

09 May 1957

Media Count:

3 Page(s)

Report Number(s):

P-1017

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An analytic technique is described for direct determination of the outcome of optimal aerial bombing or reconnaissance campaigns against strategic targets, without the customary laborious exploration of variations in attack strategy. The scope of this analysis permits wide latitude in the nature

of the strategic campaign and its environment, including the following: the criterion defining an optimum campaign may be that of minimum cost, or minimum air crew loss for a fixed level of target destruction, with or without additional constraints such as specified maximum campaign duration; aircraft losses may be due to enemy area and local defenses, non-combat causes, or due to destruction while on their own base. Several examples are used to illustrate how the analytic method presented here leads to a better understanding of the significant features of strategic campaigns, and their sensitivity to variations in assumptions, than can be gleaned from an essentially empirical study of many individual campaigns. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224022

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Dynamic Programming Solution of Allocation Problems,

Report Date:

09 May 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606378

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL EQUATIONS IN THE THEORY OF DYNAMIC PROGRAMMING--VIII: THE VARIATION OF GREEN'S FUNCTIONS, ONE DIMENSIONAL CASE,

Personal Author(s):

Bellman,Richard

Report Date:

08 May 1957

Media Count:

8 Page(s)

Report Number(s):

P-1081

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The functional equation technique of dynamic programming is used to study the dependence of the Green's function of the equation $u' + q(x)u = f(x)$, $u(a) = u(1) = 0$, upon the parameter a . (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606377

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC PROBLEMS OF ALLIANCE,

Personal Author(s):

Hoag,Malcolm W

Report Date:

08 May 1957

Media Count:

3 Page(s)

Report Number(s):

P-1080-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) After discussing the customary view taken of alliance economics and its drawbacks the argument considers alternative views. Narrow tests of economic efficiency in military allocations are seen to be sharply restricted in applicability, while a broad formulation in terms of game theory avoids these restrictions at the overriding cost of unworkability. Yet some workable compromise must be evolved to handle urgent practical problems, and one way is suggested by the traditional treatment of civilian trade problems. The outstanding issues confronting any such treatment of burdensharing problems and the choice of military means are then sketched.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606376

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONSTRUCTION OF MAXIMAL DYNAMIC FLOWS IN NETWORKS,

Personal Author(s):

Ford,L R ,Jr

Fulkerson,D R

Report Date:

07 May 1957

Media Count:

9 Page(s)

Report Number(s):

P-1079

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This note describes briefly an algorithm for solving the following problem. Suppose given a network (linear graph) in which each link has associated with it two positive integers, one a commodity flow

capacity, the other a traversal time. Assuming that some node of the network is a source for the commodity, another a sink, and the remaining may either transship the commodity immediately on receipt or hold for later shipment, what is the maximal amount that can be shipped from source to sink in any given number of time periods. No proofs are given.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606375

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SMALL SAMPLE DISTRIBUTION OF N OMEGA SUB N(2),

Personal Author(s):

Marshall,A W

Report Date:

02 May 1957

Media Count:

3 Page(s)

Report Number(s):

P-1077

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606374

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET ATOMIC POWER PROGRAM: LARGE OR SMALL,

Personal Author(s):

Kramish,Arnold

Report Date:

01 May 1957

Media Count:

9 Page(s)

Report Number(s):

P-1076

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) At the Twentieth Party Congress in January, 1956, a directive was given to 'build atomic power plants with a total capacity of 2,000,000 kw to 2,500,000 kw in 1956-1960.' When this order was published, observers in the West naturally questioned whether 'total' referred to the rated thermal or electrical capacity of the atomic power stations. The United States and British programs have been publicized in terms of how much electricity (or useful power) will be produced rather than what the total heat capacity of the power reactors might be. The latter figure would be more than three times the electrical rating, depending on the thermodynamic efficiency of the system. The dangers inherent in utilizing this ambiguous Soviet data are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606373

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIMULATION IN RAND'S LOGISTICS SYSTEMS LABORATORY,

Personal Author(s):

Haythorn,William W

Report Date:

30 Apr 1957

Media Count:

10 Page(s)

Report Number(s):

P-1075

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The techniques of simulation being developed for the Logistics Laboratory are applicable to many kinds of supply and distribution systems. With modifications, it should be possible to extend the techniques to many industrial and business enterprises where servicetesting of new management policies and procedures is desirable but difficult to implement because of organizational interactions or the danger of disrupting ongoing activities. The kinds of problems that seem especially relevant are those involving inventory control, inventory size, centralized versus decentralized procurement, centralized versus decentralized stocking, etc.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606372

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/606372.pdf

Size: 425 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD606372>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SIMULATION IN RAND'S SYSTEM RESEARCH LABORATORY

Personal Author(s):

Chapman, Robert L

Report Date:

30 Apr 1957

Media Count:

11 Page(s)

Report Number(s):

RAND/P-1074

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This research attempted to obtain the predictable features of a closed system by exploiting man's capacity to seek and find problem solutions. That is, if man could be motivated to seek the system's goal, and if he were provided knowledge of operational results, a disparity between actual and desired performance might serve as an error feedback to trigger adaptation of operating practices to improve effectiveness. To explore this possibility, a particular man-machine system, a part of the air-defense network, was simulated in the laboratory. Included in the laboratory system were not only functional representations of the machine components but also the men themselves--under such conditions as to permit them the latitude of action found in the real world. Such a system was exposed to successively more difficult task situations, the results of performance were reported back to the crew, and the questions asked were: Could men learn to improve system performance; 'what' did they learn; and 'why' did they learn.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0123545

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE GROWTH OF CHINA'S SCIENTIFIC AND TECHNICAL MANPOWER.

Descriptive Note:

Research memo.,

Personal Author(s):

IKLE, F C

Report Date:
27 Apr 1957
Media Count:
74 Page(s)
Report Number(s):
RM-1893
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0605077
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) UPPER BOUNDED VARIABLES IN LINEAR PROGRAMMING,
Personal Author(s):
Dantzig, George B
Johnson, S M
Report Date:
24 Apr 1957
Media Count:
14 Page(s)
Report Number(s):
P-921
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:
(U) The purpose of the paper is to develop short-cut computational methods for solving an important class of systems involving upper bound restraints on the variables.
Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606369

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PROPOSAL FOR REDUCING THE COST OF LOGISTICS SUPPORT,

Personal Author(s):

Petersen,James W

Steger,Wilber

Report Date:

23 Apr 1957

Media Count:

8 Page(s)

Report Number(s):

P-1068

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Deferral of procurement is distinctly worthwhile for some items. These are, for the most part, expensive spare parts which are few enough to be managed with considerable attention, and also of such a nature that spares consumption is almost certainly sure to be low during the phasing-in of new equipment. The savings indicated may be as high as sixty per cent of the total cost of expensive items under the present supply system, and undoubtedly exceeds thirty per cent of this cost. Since expensive spares constitute more than fifty per cent of the total dollar value of the supply system, the indicated savings are very substantial. The deferred procurement system does not result in a noticeable reduction of the effectiveness of the supply system if deferral is practiced just long enough to collect sufficient data to make a substantially improved forecast of future consumption. In the current study, this period was approximately eighteen months in length.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0623560

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POISSON'S RATIO FOR HONEYCOMB SANDWICH CORES,

Personal Author(s):

Hoffman, George A

Report Date:

23 Apr 1957

Media Count:

30 Page(s)

Report Number(s):

P-946 rev.

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An interesting property of honeycomb cores is that their apparent Poisson's ratio may assume values from almost zero to well above one, depending upon the shape and orientation of the cells. This unusual behavior prompted this study, wherein Poisson's ratio is derived for cores with hexagonal and square cells. The ratio is then related to the stiffness of a sandwich panel containing such cores. It is shown that large variations of Poisson's ratio for honeycomb cores have little effect on the stiffness of the sandwich panel. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606368

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON THE NUMERICAL INTEGRATION OF A CLASS OF NON-LINEAR HYPERBOLIC DIFFERENTIAL EQUATIONS,

Personal Author(s):

Bellman, Richard

Cherry, I

Wing, G M

Report Date:

22 Apr 1957

Media Count:

6 Page(s)

Report Number(s):

P-1067

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper was to introduce a new method for the numerical integration of a class of nonlinear hyperbolic partial differential equations which admit shocks. The equation $u_{sub t} = -u u_{sub x}$ is discussed, and numerical results are given. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606367

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/606367.pdf

Size: 554 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD606367>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A Markovian Decision Process

Personal Author(s):

Bellman, Richard

Report Date:

18 Apr 1957

Media Count:

15 Page(s)

Report Number(s):

P-1066

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The purpose of this paper is to discuss the asymptotic behavior of the sequence $(f_{n(i)})$ generated by a nonlinear recurrence relation. This problem arises in connection with an equipment replacement problem, cf. S. Dreyfus, A Note on an Industrial Replacement Process.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606366

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE NON-NEGATIVITY OF GREEN'S FUNCTIONS,

Personal Author(s):

Bellman, Richard

Report Date:

18 Apr 1957

Media Count:

3 Page(s)

Report Number(s):

P-1065

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to give a short proof of the non-negativity of Green's functions associated with certain classes of differential equations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606269

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROPERTIES OF THE ATMOSPHERE AND IONOSPHERE BETWEEN 90 AND 300 KM,

Personal Author(s):

Kallmann,H K

Report Date:

16 Apr 1957

Media Count:

10 Page(s)

Report Number(s):

P-1023

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Recent results of upper atmosphere physics which have come out of experimental and theoretical studies of high altitude research are presented. The region of investigation covers the height between 90 and 300 km and thus includes the ionosphere. The study is based primarily on a new model of the atmosphere derived from rocket observations, as well as on the Chapman theory of ionized layer formation. Some of the simplifying assumptions, usually made in evaluating this theory, have been

eliminated. As a result, a picture of the ionosphere was obtained which agrees rather well with the experimental results obtained by means of rockets. These results show that the ionosphere does not consist of ionized layers but rather of continuously densely ionized regions. They furthermore show that the true height of reflection of radio waves is considerably lower than the apparent height. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606365

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE THEORY OF GAMES,

Personal Author(s):

Bellman,Richard

Report Date:

15 Apr 1957

Media Count:

2 Page(s)

Report Number(s):

P-1062

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to present an expository account of the fundamental ideas of the theory of games, together with a discussion of some of the unresolved aspects of the theory. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606364

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS PREPARED FOR ANNUAL MEETING OF THE ASSOCIATION FOR ASIAN STUDIES, PANEL DISCUSSION OF ECONOMIC DEVELOPMENT IN SOUTH ASIA, SHERATON-PLAZA, BOSTON, APRIL 3, 1957,

Personal Author(s):

Wolf, Charles ,Jr

Report Date:

15 Apr 1957

Media Count:

10 Page(s)

Report Number(s):

P-1061-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The political and economic factors involving the growth and development of South Asia are discussed. India's Second Five Year Plan, and government leadership in the Philippines and Indonesia are also considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605117

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BOUNDS ON THE EXPECTATION OF A CONVEX FUNCTION OF A RANDOM VARIABLE,

Personal Author(s):

Edmundson, H P

Report Date:

09 Apr 1957

Media Count:

6 Page(s)

Report Number(s):

P-982

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Suppose that f is a convex function defined on the interval $I = (a, b)$ where $b > a$. Let X be a random variable defined on I whose expectation $E(X)$ is finite. Upper and lower bounds for the expectation $E(f(X))$ are derived using the theory of moment spaces. The lower bound obtained agrees with that of classical analysis, while the upper bound is believed to be a new result. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606359

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PROSPECTS OF A UNIFIED THEORY OF ORGANIZATIONS,

Personal Author(s):

Helmer,Olaf

Report Date:

03 Apr 1957

Media Count:

8 Page(s)

Report Number(s):

P-1053

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Despite the success of numerous sporadic efforts in the study of organizations, there is at present no unified theory of organizations. This would require a clear-cut conceptual apparatus and a methodology for prediction. To achieve the former within the foreseeable future it might be wise to tie into the existing terminology of game theory; the latter may require taking a new look at the psychological problems involved and introducing something like an operations research approach to them. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606357

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ECONOMICS OF NAVY PAY,

Personal Author(s):

ENTHOVEN,Alain C

Report Date:

02 Apr 1957

Media Count:

19 Page(s)

Report Number(s):

P-1051

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The economic aspects of the navy pay structure are discussed with respect to longevity, morale, personnel performance, and retention of experienced personnel.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606305

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PSYCHOANALYTIC INTERPRETATION OF WOODROW WILSON: A BOOK REVIEW,

Personal Author(s):

Brodie,B

Report Date:

01 Apr 1957

Media Count:

3 Page(s)

Report Number(s):

P-1096

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An account of the strange relationship between Woodrow Wilson and Col. E. M. House, a close advisor, and of their part in history, is presented in the volume reviewed. The authors have attempted a psychoanalytic study of the personality structure of Woodrow Wilson.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606356

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET LABOR AND THE QUESTION OF PRODUCTIVITY,

Personal Author(s):

Gliksman,Jerzy G

Report Date:

29 Mar 1957

Media Count:

1 Page(s)

Report Number(s):

P-1048

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to discuss certain recent changes in Soviet labor policy which have been forced upon the Soviet leadership by the logic of this new order. The Soviet internal changes, as far as they go, do not tend to alter the basic tenets of Soviet rule; they are only an attempt to adjust these tenets to the requirements of a smoother and more efficient operation of the Soviet model of a modern industrial society. This is true of the reforms in the economic sphere, as well as the political. Of the economic reforms, recent changes in the field of industrial relations are geared primarily to the basic problem of any modern economy -- labor productivity.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606353

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRINCIPLES OF SELF-CONTAINED NAVIGATION,

Personal Author(s):

Bailey,H H

Report Date:

29 Mar 1957

Media Count:

1 Page(s)

Report Number(s):

P-1044

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Following a brief introduction on the nature and magnitude of the current effort in self-contained navigation, the basic functions of all navigation are analysed. Several methods of fixing are discussed, and it is shown that celestial navigation is limited by an inherent difficulty in establishing an accurate vertical on board a moving (accelerating) vehicle. Several methods of dead-reckoning are also analysed, and it is pointed out that the first to be free of fundamental (as opposed to instrumental) limitations is that using a doppler radar and a gyroscopic heading reference. Finally, the basic principles of inertial navigation are developed and presented in a simple, physical way. These systems solve the problem of establishing an accurate vertical by measuring vehicle accelerations; and simultaneously (and inseparably), by establishing an accurate vertical, they permit meaningful acceleration measurements to be made. The physical basis for Schuler Tuning is explained in elementary terms. The fundamental differential equation of inertial systems is derived. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606301

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GENERALIZED EQUIPMENT REPLACEMENT STUDY,

Personal Author(s):

Dreyfus,Stuart E

Report Date:

15 Mar 1957

Media Count:

3 Page(s)

Report Number(s):

P-1039

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The functional equation technique of dynamic programming is useful in determining the optimal age of replacement of durable machinery. The paper reviews Bellman's analytic solution of a simplified model, presents a computation scheme applicable to more realistic models, and discusses various dynamic programming formulations applicable in the field of equipment replacement. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422841

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EMPIRICAL EXPLORATIONS OF THE LOGIC THEORY MACHINE. A CASE STUDY IN HEURISTICS,

Personal Author(s):

Newell ,A

Shaw ,J C

Simon,H A

Report Date:

14 Mar 1957

Media Count:

48 Page(s)

Report Number(s):

P-951

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Distribution: NOFORN.

Abstract:

(U) The Logic Theory Machine is a program that discovers proofs for theorems in elementary symbolic logic. It does this, not by means of an algorithm (although such algorithms exist), but by using heuristic devices, such as a human does. It is being studied as part of a research effort directed toward understanding the processes involved in learning, problem-solving, recognizing patterns, etc. This paper presents the results of detailed explorations of the program on RAND's JOHNNIAC. It describes the

program and evaluates the role of the various methods, and heuristics in contributing to the total problem solving capability of the machine. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606300

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND THE VARIATIONAL SOLUTION OF THE THOMAS-FERMI EQUATION,

Personal Author(s):

Bellman, Richard

Report Date:

14 Mar 1957

Media Count:

9 Page(s)

Report Number(s):

P-1038

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605116

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONCEPTS, ORIGINS, AND USE OF LINEAR PROGRAMMING,

Personal Author(s):

Dantzig, George B

Report Date:

07 Mar 1957

Media Count:

20 Page(s)

Report Number(s):

P-980

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper discusses the concept, origins, and some of the applications of linear programming.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606358

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PSYCHOLOGICAL FACTOR IN SOVIET FOREIGN POLICY,

Personal Author(s):

Tucker, Robert C

Report Date:

07 Mar 1957

Media Count:

1 Page(s)

Report Number(s):

P-1052

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Stalin's death is considered as an implication for change in the motivation of Soviet foreign policy. The operative aim of the politics of cold war as practiced by Stalin after World War II was total control of foreign territory and people. The Stalinist picture of the world as cleanly divided between two antagonistic camps was a reflex of this drive for total control. One of its consequences was to exclude the notion of political neutrality or a 'third force' in world politics. Therefore, Stalin's death occasioned a psychological revolution in Soviet foreign policy. The driving concern with totality of control subsided, and there arose in the postStalin period a new expansionism of Soviet influence aimed at creating new spheres of influence rather than new satellites. The two-world image faded out, giving way to a picture in which two opposing systems of states compete for preponderance of influence in third states not belonging to either system.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606295

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHAT IS A SYSTEM,

Personal Author(s):

Hoag,Malcolm W

Report Date:

05 Mar 1957

Media Count:

2 Page(s)

Report Number(s):

P-1035

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The operation or system that is relevant depends upon the problem posed for analysis. An 'operation' or 'system' is a set of interrelated actions about which policy decisions must be made. This research seeks to find a good basis for decisions, using whatever scientific tools are appropriate.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606292

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOLUME 21,

Personal Author(s):

Hastings,Cecil ,Jr

hastings,Elaine

Report Date:

04 Mar 1957

Media Count:

11 Page(s)

Report Number(s):

P-1033

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of chi-square integrals are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422568

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELEMENTS OF A THEORY OF HUMAN PROBLEM SOLVING,

Personal Author(s):

Newell ,Allen

Shaw ,J C

Simon,Herbert A

Report Date:

04 Mar 1957

Media Count:

39 Page(s)

Report Number(s):

P971

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605105

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GENERAL SYSTEMS APPROACHES TO TELECOMMUNICATION OPTIMIZATION PROBLEMS,

Personal Author(s):

KALABA,R E

Juncosa,M L

Report Date:

01 Mar 1957

Media Count:

22 Page(s)

Report Number(s):

P-964

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Linear programming and dynamic programming techniques are used to treat large scale communication system optimization problems at the system level in a straightforward and computationally feasible manner. Treatments for communication system extension problems and for equipment replacement policies are provided. Various generalizations are indicated.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224018

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) War Games.

Personal Author(s):

Specht, Robert D

Report Date:

Mar 1957

Media Count:

19 Page(s)

Report Number(s):

P1041

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422567

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROGRAMMING THE LOGIC THEORY MACHINE,

Personal Author(s):

Newell,Allen

Shaw,J C

Report Date:

28 Feb 1957

Media Count:

39 Page(s)

Report Number(s):

P954

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Logic Theory Machine (called LT, see P-951) represents a class of non-numerical problems with quite different programming requirements than either normal arithmetic calculations or business data processing. The storage requirements are extremely variable, with the results of many computations being changed in the memory structure. The program itself is a large, complicated hierarchy of subroutines. For LT an intermediate language (interpretive pseudo code) was written for the RAND JOHNNIAC. The paper first characterizes the programming problems involved and then illustrates solutions to them by describing the language. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606294

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FEATHER RIVER WATER FOR SOUTHERN CALIFORNIA,

Personal Author(s):

DeHaven,James C

Hirshleifer,Jack

Report Date:

20 Feb 1957

Media Count:

11 Page(s)

Report Number(s):

P-1034-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to estimate the role which water supply from the Feather River Project should play, if rational economic considerations governed, in the calculations of Southern California. It is suggested that the responsible Southern California authorities should insist on a similar report before deciding whether they are willing to bear--or rather, have their constituents bear--the additional cost required to enlarge the Project to allow deliveries to Southern California.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606260

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELIABILITY AND THE COMPUTER,

Personal Author(s):

Ware,Willis H

Report Date:

20 Feb 1957

Media Count:

1 Page(s)

Report Number(s):

P-1008

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The meaning of reliability in a computing system is examined, and the contrast between analog and digital systems in this respect is discussed. The paper reviews a few salient aspects of the computer reliability problem, and contributes perhaps a new viewpoint to some parts of the reliability question.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606355

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET TRADE AND AID: TRICKLE OR TORRENT,

Personal Author(s):

Heymann,Hans ,Jr

Report Date:

14 Feb 1957

Media Count:

2 Page(s)

Report Number(s):

P-1047

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problems of economic growth in the Soviet bloc and the non-communist world, particularly as they may affect the economic competition between the two, are discussed. The relationship between the growth of the Soviet economy and its participation in foreign trade and technical assistance is examined, and an appraisal is given of the likely impact of the Soviet 'economic offensive'.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606266

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON MATRIX THEORY; XIV: ON THE JACOBI RELATION FOR THE BRACKET SYMBOL,

Personal Author(s):

Bellman, Richard

Report Date:

12 Feb 1957

Media Count:

1 Page(s)

Report Number(s):

P-1018

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper contains a derivation of the Jacobi relation for the bracket symbol using the associative property of exponential matrices. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606267

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DISPERSION IN THE UPPER ATMOSPHERE,

Personal Author(s):

Rapp,R R

Edinger,J G

Report Date:

07 Feb 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Transosonde balloon data are analysed to provide a measure of the dispersion on a large scale in the upper atmosphere. An expression for the autocorrelation function is inferred from synoptic experience and is applied to autocorrelation values computed from the balloon data. Taylor's theorem is applied to this function to compute dispersion out to ten days. A comparison is made with direct computation at two days. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606268

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RANDOM FUNCTIONS OF COSMIC-RAY CASCADES,

Personal Author(s):

Harris,T E

Report Date:

07 Feb 1957

Media Count:

11 Page(s)

Report Number(s):

P-1020

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The usual model for the soft component of cosmic radiation, appropriate to the assumption of complete screening, is studied. First treating the case where collision loss is neglected, the expected values for the number of electrons and photons are related to the probability distribution of a certain nonmultiplicative Markov process, limit-theorems for this process having an interpretation in terms of the original multiplicative process. The total energy in all electrons is shown to converge in probability to a positive constant. If collision loss is included, certain peculiarities are pointed out in the fluctuations of the number of electrons. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605121

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SEQUENTIAL PRODUCTION PLANNING OVER TIME AT MINIMUM COST,

Personal Author(s):

Johnson,S M

Report Date:

04 Feb 1957

Media Count:

10 Page(s)

Report Number(s):

P-989

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Production of a given commodity is to be scheduled over time to meet known future requirements while minimizing total costs. The costs include both storage and production costs as functions of time. The unit production cost is an increasing function of the production rate. Previous solutions to this problem involved complicated iterative procedures. A new approach brings out the basic principle

involved and leads to a simple solution. This coincides with a common-sense technique sometimes used in business. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0123517

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GRAPHS OF PARTIAL SUMS OF THE BINOMIAL DISTRIBUTION

Personal Author(s):

KAHN, HERMAN

MANN, IRWIN

Report Date:

Feb 1957

Media Count:

14 Page(s)

Report Number(s):

RM-1880

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606264

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON GRADIENT METHODS FOR APPROACHING CONSTRAINED MAXIMA,

Personal Author(s):

Arrow, Kenneth J

Hurwicz, Leonid

Marschak, Thomas

Report Date:

01 Feb 1957

Media Count:

9 Page(s)

Report Number(s):

P-1015

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224349

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Game-Theoretical Approach to Organization Theory.

Personal Author(s):

Helmer, Olaf

Report Date:

Feb 1957

Media Count:

14 Page(s)

Report Number(s):

P1026

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605793

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON SOME IDENTICALLY DISTRIBUTED STATISTICS,

Personal Author(s):

Linnik,Y V

Report Date:

01 Feb 1957

Media Count:

1 Page(s)

Report Number(s):

T-71

TT-64 71373

Monitor Series:

64 71373

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606298

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCIENTIFIC AIDS TO DECISIONMAKING: A PERSPECTIVE,

Personal Author(s):

COLLBOHM,F R

Report Date:

31 Jan 1957

Media Count:

11 Page(s)

Report Number(s):

P-1032

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Good answers to hard questions require well-designed analyses. A well-designed analysis begins with a definition of the problem, a clarifying of the objectives, and results in a breaking down of the problem into workable components to which a combination of both expert judgment and these new mathematical tools can be brought to bear to provide a sound basis for intelligent decision making.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604962

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON B. KLEIN'S 'DIRECT USE OF EXTREMAL PRINCIPLES IN SOLVING CERTAIN PROBLEMS INVOLVING INEQUALITIES',

Personal Author(s):

Dantzig,George B

Report Date:

29 Jan 1957

Media Count:

10 Page(s)

Report Number(s):

P-763

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the May, 1955 issue of the Journal of the Operations Research Society of America, B. Klein proposed that ordinary methods of the differential calculus be used to minimize a function z of n variables x_1, x_2, \dots, x_n , where the latter are subject to inequality constraints instead of the usual equality constraints. This report discusses whether this proposal can be used constructively to determine the optimum. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605918

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE OPTIMIZATION OF TWO-STAGE ROCKETS,

Personal Author(s):

Goldsmith,M

Report Date:

29 Jan 1957

Media Count:

8 Page(s)

Report Number(s):

P-1004

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Equations useful in design studies are derived for determining the optimum weight distribution for two-stage tandem rockets for the case of different structural factors and propellant specific impulses in each stage. Minimization of gross weight for a given required burnout velocity and payload is the criterion of optimization used. For illustrative purposes an example is included in which the optimum distribution is found for a hypothetical chemically-boosted atomic rocket. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605075

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON MATRIX THEORY---XIII: SLIGHTLY INTERTWINED LINEAR PROGRAMMING MATRICES,

Personal Author(s):

Bellman, Richard

Report Date:

23 Jan 1957

Media Count:

6 Page(s)

Report Number(s):

P-918

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper the functional--equation approach of dynamic programming is used to treat a linear programming problem involving a 'slightly intertwined' matrix--i.e., one that is almost block diagonal.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0123514

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RELATIONSHIPS BETWEEN PROGRAM ELEMENTS AND SYSTEM DEMAND FOR AIRFRAME SPARE PARTS

Personal Author(s):

GOLDMAN, T A

Report Date:

22 Jan 1957

Media Count:

80 Page(s)

Report Number(s):

RM-1858

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605018

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPLICATION OF DYNAMIC PROGRAMMING TO THE AIRPLANE MINIMUM-TO-CLIMB PROBLEM,

Personal Author(s):

Cartaino, T F

Dreyfus, S E

Report Date:

18 Jan 1957

Media Count:

44 Page(s)

Report Number(s):

P-834

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The dynamic-programming technique developed at The RAND Corporation is applied to the solution of the airplane minimum time-to-climb problem. A brief introduction to dynamic programming is presented, followed by an exposition of the climb problem and the solution of a typical example case. It is concluded that dynamic programming offers a method of solution for the climb problem which is fast, is readily adaptable to routine engineering calculation, and allows the inclusion of the effects of variations in airplane weight and drag along the flight path. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606263

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON MONOTONE CONVERGENCE TO SOLUTIONS OF FIRST ORDER DIFFERENTIAL EQUATIONS,

Personal Author(s):

Bellman, Richard

Report Date:

16 Jan 1957

Media Count:

8 Page(s)

Report Number(s):

P-1012

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this brief note was to show that one can obtain a monotone increasing sequence of approximations to the solution of the differential equation $du/dt = \phi(u,t)$, $u(0) = c$, provided that one assume that $\phi(u,t)$ is a twice differentiable convex function of u in some t -interval $(0, t_{sub} 0)$. Similarly, monotone decreasing sequences can be obtained if ϕ is concave. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606262

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLE RELATIONSHIP BETWEEN THE SHOCK AND EXPANSION PRESSURE COEFFICIENTS AS A BASIS FOR STUDYING TWO-DIMENSIONAL HYPERSONIC FLOW,

Personal Author(s):

RAYMOND,J L

Report Date:

15 Jan 1957

Media Count:

64 Page(s)

Report Number(s):

P-1011

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A simple relation between the two-dimensional wedge pressure coefficients for shock and expansion is shown to apply for the entire hypersonic regime. As a consequence, the hypersonic small-disturbance theory expressions for these coefficients are further simplified as are calculations of pressure distributions on arbitrary two-dimensional configurations at hypersonic speeds. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605091

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLE RELATION BETWEEN THE SHOCK AND EXPANSION PRESSURE COEFFICIENTS FOR
TWO-DIMENSIONAL HYPERSONIC FLOW,

Personal Author(s):

Raymond, J L

Williams, E P

Report Date:

15 Jan 1957

Media Count:

4 Page(s)

Report Number(s):

P-940

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605062

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RESPONSE OF A BISSYMMETRIC AIRCRAFT TO SMALL COMBINED PITCH, YAW, AND ROLL
CONTROL ACTIONS.

Descriptive Note:

An abridged Doctoral thesis,

Personal Author(s):

Davis, Robert A

Report Date:

27 Dec 1956

Media Count:

34 Page(s)

Report Number(s):

P-898

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The linearized equations of motion of a rolling bisymmetric aircraft are formulated using body axes. It is shown that (a) the rate of change of angle of attack is a vector; (b) a linearized form of the downwash-lag terms is valid only if the downwash-roll angle be small; and (c) such a linearized form must use the vector relations of (a). As a result, stability criteria are derived which are independent of the rolling of the reference axis system. The complete solution to the equations is presented for a stepped pitch/yaw control action at constant roll rate. The complete solution is likewise given for a variable roll rate, valid only for a simplified system in which the Magnus Effect is neglected. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606258

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A ROUTING PROBLEM,

Personal Author(s):

Bellman,Richard

Report Date:

20 Dec 1956

Media Count:

8 Page(s)

Report Number(s):

P-1000

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Given a set of N cities, with every two linked by a road, and the times required to traverse these roads, we wish to determine the path from one given city to another given city which minimizes the travel time. The times are not directly proportional to the distances due to varying quality of roads, and v varying quantities of traffic. The functional equation technique of dynamic programming, combined with approximation in policy space, yield an iterative algorithm which converges after at most (N-1) iterations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605099

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE ROLE OF DYNAMIC PROGRAMMING IN STATISTICAL COMMUNICATION THEORY,

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Report Date:

19 Dec 1956

Media Count:

22 Page(s)

Report Number(s):

P-949

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The object of the paper is to show that the fundamental problem of determining the utility of a communication channel in conveying information can be interpreted as a problem within the framework of multi-stage decision processes of stochastic type and as such may be treated by means of the theory of dynamic programming. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605127

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE PRINCIPLE OF INVARIANT IMBEDDING AND ONE-DIMENSIONAL NEUTRON MULTIPLICATION,

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Wing, G Milton

Report Date:

19 Dec 1956

Media Count:

10 Page(s)

Report Number(s):

P-996

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A new method is introduced for treating problems involving neutron multiplication by fission, with special regard to questions of critical mass and distribution of neutrons. The results derive from applications of the principle of invariant imbedding, which was introduced and discussed in two previous papers (see AD-605 023, AD-605 114). (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605126

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) QUEUEING WITH BALKING,

Personal Author(s):

Haight, Frank A

Report Date:

18 Dec 1956

Media Count:

26 Page(s)

Report Number(s):

P-995

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An investigation of a stochastic process in which the probability of transition depends on the state of the system. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605125

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/605125.pdf

Size: 598 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD605125>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THEORY OF GAMES OF STRATEGY

Personal Author(s):

Dresher, Melvin

Report Date:

17 Dec 1956

Media Count:

15 Page(s)

Report Number(s):

P-994

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The paper contains a general survey of the mathematical theory of zero-sum two-person games.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605123

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME PRINCIPLES FOR A DATA-PROCESSING SYSTEM IN LOGISTICS,

Personal Author(s):

Geisler,M A

Report Date:

12 Dec 1956

Media Count:

24 Page(s)

Report Number(s):

P-991

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses some of the principles and concepts of a revised logistics data processing system proposed for the Air Force. These ideas provide a general framework in which a data processing system might be developed that would be able to meet the operational needs of the 1960's. The ideas developed in the paper, although pointed particularly at the Air Force, might have relevance and use for the other military services and industry in general. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605122

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NETWORK FLOW AND SYSTEMS OF REPRESENTATIVES,

Personal Author(s):

Ford,L R ,Jr

Fulkerson,D R

Report Date:

11 Dec 1956

Media Count:

16 Page(s)

Report Number(s):

P-990

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Two basic theorems of network flow theory are applied to determine necessary and sufficient conditions for (a) the existence of a system of representatives for a collection of subsets of a given set such that each element, a sub i of the given set occurs at least $\alpha_{sub\ i}$ times in the system and at most $\beta_{sub\ i}$ times (a system of restricted representatives), and (b) the existence of a common system of restricted representatives for two different collections of subsets of the given set. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422566

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROBLEM SOLVING IN HUMANS AND COMPUTERS,

Personal Author(s):

Newell,Allen

Shaw,J C

Simon,Herbert A

Report Date:

07 Dec 1956

Media Count:

12 Page(s)

Report Number(s):

P987

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0112418

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE ALLOCATION OF AIRCRAFT TO ROUTES. AN EXAMPLE OF LINEAR PROGRAMMING UNDER
UNCERTAIN DEMAND

Personal Author(s):
FERGUSON, ALLEN R
DANTZIG, GEORGE B
Report Date:
07 Dec 1956
Media Count:
43 Page(s)
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0605111
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOVIET ECONOMIC AID IN SOUTHEAST ASIA: THREAT OR WINDFALL,
Personal Author(s):
Wolf, Charles ,Jr
Report Date:
06 Dec 1956
Media Count:
18 Page(s)
Report Number(s):
P-972-RC
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:

(U) The new Soviet diplomacy in Asia, involving an active effort to extend economic aid to a select group of countries who qualify as non-allied with the United States, or, in some sense of the term, as neutralists, is discussed. To date, the Soviet Bloc has made aid commitments in South and Southeast

Asia of over \$380 million to India, Afghanistan, Indonesia, Cambodia, and Burma. Virtually all the aid has been committed in the past two years; most of it since early 1956. The scope and timing of the Bloc's aid efforts raise a number of basic questions for United States foreign economic policy: Is Soviet aid in Southeast Asia a clear threat to U. S. interests. Should offers of aid by the Bloc be responded to by U. S. counter-offers of more aid on more favorable terms. And what can be said about the effect of Soviet aid to non-allied countries on our SEATO allies.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605109

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCIENTIFIC PROGRESS AND POLITICAL SCIENCE,

Personal Author(s):

Brodie,Bernard

Report Date:

30 Nov 1956

Media Count:

22 Page(s)

Report Number(s):

P-968

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problems facing political scientists today regarding policy decisions which affect national security are discussed. Political science is viewed in terms of its historical development and limitations, with emphasis being placed upon its relationship to military policy in matters of national and international significance.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605119

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE TRAGEDY OF HUNGARY: A REVOLUTION WON AND LOST,

Personal Author(s):

Garthoff,Raymond L

Report Date:

28 Nov 1956

Media Count:

30 Page(s)

Report Number(s):

P-984

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Soviet decision to intervene with force and crush the revolution in Hungary in 1956 is discussed. The revolution had not only succeeded in Hungary, it had been taken by the Soviets as an unwanted but accepted fact by October 30. Then, in a moment of defiance, the Hungarian people and their leaders on October 31 drove beyond the point of possible Soviet acceptance and led the Soviet leaders to decide upon a course of military intervention and repression.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0123534

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ELECTRIC POWER DEVELOPMENT IN MAINLAND CHINA: PREWAR AND POSTWAR

Descriptive Note:

Research memo.,

Personal Author(s):

Yen, K C

Report Date:

27 Nov 1956

Media Count:

119 Page(s)

Report Number(s):

RM-1821

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605034

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE STEADY, AXIALLY SYMMETRIC FLOW OF A VISCOUS FLUID IN A DEEP ROTATING CYLINDER WHICH IS HEATED FROM BELOW,

Personal Author(s):

Lance,G N

DeLand,E C

Report Date:

20 Nov 1956

Media Count:

32 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The principal assumptions considered include transfer of heat by molecular conduction only (and not by convection), no evaporation from the surface of the fluid, elimination of the non-linear terms from the equations and certain analytic approximations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605101

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LARGE DATA-HANDLING EQUIPMENT AS A COMMERCIAL TOOL,

Personal Author(s):

Postley, John A

Report Date:

19 Nov 1956

Media Count:

28 Page(s)

Report Number(s):

P-952

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The primary purpose of the paper is to present for management an approach to the employment of large data-handling equipment in commercial problems. This approach is in the form of ideas which, in a very general way, may indicate to management some major requirements to consider and pitfalls to avoid in connection with this employment.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605079

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTATIONAL ASPECTS OF DYNAMIC PROGRAMMING,

Personal Author(s):

Dreyfus,Sttuart E

Report Date:

19 Nov 1956

Media Count:

14 Page(s)

Report Number(s):

P-924

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Several computational difficulties are characteristic of all dynamic programming solutions. This paper will attempt to isolate the most important of these difficulties, to examine present techniques, and to suggest areas in which further developments are required. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606589

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUILIBRIUM POINTNTS IN GAMES WITH VECTOR PAYOFFS,,

Personal Author(s):

Shapley,L S

Report Date:

15 Nov 1956

Media Count:

10 Page(s)

Report Number(s):

P-1212

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The payoff of a game sometimes takes the form of a vector having components that represent amounts of different things, such as ships, men, money, etc., of which the relative values are unknown. The purpose of this paper is to define and characterize the equilibrium point solutions of games of this kind. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605114

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE PRINCIPLE OF INVARIANT IMBEDDING AND DIFFUSE RELECTION FROM CYLINDRICAL REGIONS,

Personal Author(s):

Bellman,Richard

Kalaba,Robert

Report Date:

14 Nov 1956

Media Count:

8 Page(s)

Report Number(s):

P-976

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that the principle of invariant imbedding (introduced in AD-605 023) permits the treatment of problems of radiative transfer from cylindrical and spherical geometries in a unitary fashion.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605115

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/605115.pdf

Size: 243 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD605115>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A DYNAMIC PROGRAMMING SOLUTION TO A CASCADING PROBLEM ARISING IN HEAVY WATER PRODUCTION

Personal Author(s):

Bellman, Richard

Report Date:

14 Nov 1956

Media Count:

8 Page(s)

Report Number(s):

P-977

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The mathematical problem is that of minimizing the distilling plant size for an m-cascade process.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605074

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE APPLICATIONS OF DYNAMIC PROGRAMMING TO MATRIX THEORY,

Personal Author(s):

Bellman, Richard

Report Date:

12 Nov 1956

Media Count:

12 Page(s)

Report Number(s):

P-917

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to discuss some applications of the functional equation technique of dynamic programming to some questions of matrix theory. Consideration is first given to the solution of a system of linear equations, $Ax = b$, where A is a Jacobi matrix. Then the same problem is discussed for the case where A is 'almost' a block-diagonal matrix. Matrices of this type arise in the study of weaklycoupled mechanical or electrical systems. Finally, the calculation of the largest or smallest characteristic values of matrices of this type are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605112

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE LOGISTICS LABORATORY; HOPES AND PLANS,

Personal Author(s):

Geisler,Murray A

Report Date:

09 Nov 1956

Media Count:

18 Page(s)

Report Number(s):

P-973

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The development and functions of the Logistics Systems Laboratory are described. As part of the logistics research program at RAND, it provides for the development of improved logistics data handling, especially electronic computers. The laboratory is expected to provide a basically new research method, and will complement other research in the Logistics Department.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605017

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NATURE OF AXISYMMETRIC WAVE FIELDS IN ELASTIC SOLIDS,

Personal Author(s):

Lang,H A

Report Date:

02 Nov 1956

Media Count:

44 Page(s)

Report Number(s):

P-832

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Expressions for the displacements established in an infinite half-space by a concentrated unit impulse which is a step function of time are determined by extending to the axially symmetric case, the procedure of F. Sauter's previously applied to the concentrated line shock in two dimensions. The results are used to prove that a pulse in acoustic material travels without dilatation, rotation, or acceleration. Some evidence is presented for the conjecture that wave transmission may depend upon the fact that Poisson's ratio is above or below a critical value. The importance of this basic problem to related problems in fracture initiation, spalling, explosive loads, seismology, wave reinforcements in plates of finite thickness is briefly noted.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605120

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ENGINEERING TEST REACTORS WITH LARGE CENTRAL IRRADIATION CAVITIES,

Personal Author(s):

Safonov,George

Report Date:

01 Nov 1956

Media Count:

8 Page(s)

Report Number(s):

P-986

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that a cavity test reactor with some 4000 liters of central irradiation space may achieve MTR flux levels while operating with MTR fuel plates under established conditions. Only computed results of pertinent characteristics are given.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605110

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/605110.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD605110>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SHARE -- A EULOGY TO COOPERATIVE EFFORT

Personal Author(s):

Armer, Paul

Report Date:

31 Oct 1956

Media Count:

23 Page(s)

Report Number(s):

RAND-P-969

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) SHARE is described as a users cooperative. It is made up of most of the organizations who have, or plan on getting, an IBM Type 704 Electronic Data Processing Machine. Its aim is to eliminate, as much as possible, redundant effort expended in using the 704. The history of cooperative effort in the scientific computing field is discussed, and the history of SHARE itself is covered in detail.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605106

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DISPLAY TECHNIQUE FOR PLANNING,

Personal Author(s):

Kennedy, John L

Report Date:

23 Oct 1956

Media Count:

12 Page(s)

Report Number(s):

P-965

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper describes a display technique which can be developed and used by teams of planners and decisionmakers when faced with the complexities of planning and developing large interacting systems.

In particular, it is proposed that the contextual map will substantially assist decision-making in Air Force research and development, where decisions now have critical consequences for national security.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605097

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON POSITIVE DEFINITE MATRICES AND STIELTJES INTEGRALS,

Personal Author(s):

Bellman, Richard

Report Date:

22 Oct 1956

Media Count:

10 Page(s)

Report Number(s):

P-947

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605104

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HYDRODYNAMICAL STABILITY AND POINCARÉ-LYAPUNOV THEORY-I,

Personal Author(s):

Bellman,Richard

Wing,G Milton

Report Date:

13 Oct 1956

Media Count:

10 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to initiate a rigorous theory of hydrodynamical stability. Results were established corresponding to the classical PoincareLyapunov theory for systems of nonlinear ordinary differential equations, for classes of nonlinear partial differential equations occurring in hydrodynamics.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605103

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE LINEAR DIFFERENTIAL EQUATION WHOSE SOLUTIONS ARE THE PRODUCTS OF SOLUTIONS OF TWO GIVEN LINEAR DIFFERENTIAL EQUATIONS,

Personal Author(s):

Bellman,Richard

Report Date:

10 Oct 1956

Media Count:

8 Page(s)

Report Number(s):

P-956

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to illustrate the application of a result in matrix theory to the problem of determining the linear differential equation whose solutions are the products of the solutions of two given linear differential equations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604629

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON GAMES OF SURVIVAL,

Personal Author(s):

Milnor,J

Shapley,L S

Report Date:

10 Oct 1956

Media Count:

45 Page(s)

Report Number(s):

P-622 rev.

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In a game of survival, two players with limited resources play a zero-sum game repeatedly until one of them is ruined. The solution of the survival game gives one a measure of the value of resources in terms of survival probabilities. In this paper the zero-sum game is expressed as a finite matrix, but with (possibly) incommensurable entries; hence the number of different distributions of resources that can occur during a single play may be infinite. The existence of a value and optimal strategies is proved, using the theory of semi-martingales. A simple approximation to the solution is described, and several examples are discussed. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605100

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LINEAR PROGRAMMING,

Personal Author(s):

Kalaba,Robert E

Report Date:

01 Oct 1956

Media Count:

18 Page(s)

Report Number(s):

P-950

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Topics include: examples of linear programming problems, the central mathematical problem, methods of solution, and lines along which further research is required. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605792

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ATTAINABILITY OF THE STARS,

Personal Author(s):

Sanger, Eugen

Report Date:

26 Sep 1956

Media Count:

8 Page(s)

Report Number(s):

T-69

TT-64 71372

Monitor Series:

64 71372

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The yet hypothetical quantum-rockets have jet-velocities equal to the velocity of light, so that also their flight velocities may approach the optic velocity. From the laws of classical mechanics, there would follow that the limited human life-time and the limited mass-ratio of the rocket would permit ranges of some tenths of light years, i.e., over a very limited space of our galaxy and to the very next fixed stars only. From the laws of relativistic mechanics however follows for those very near optic-velocities a considerable dilation of proper time on board of the vehicle relative to the terrestrial time, so that life of the crew and action of the rocket-motor occur slower, than would correspond to terrestrial time-scale. From this follows that within the life-span of the crew and with limited mass-ratios of the rocket, every thinkable distance in space, up to the nebulae millions of light-years distant can be covered, so that, expressed in technical terms, and from the standpoint of the crew, the vehicle seems to be able to move with considerable super optic-velocity. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605081

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEWTONIAN FLOW THEORY FOR SLENDER BODIES,

Personal Author(s):

Cole,J D

Report Date:

25 Sep 1956

Media Count:

34 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) As an aid to the aerodynamicist in the design of airframes for hypersonic speeds (speeds faster than about Mach 5), Newtonian flow theory is examined from the point of view of gas dynamics and hypersonic small-disturbance theory. A general solution of the first approximation for the flow past slender bodies (bodies which cause only a small disturbance to the stream) at zero angle of attack is given. An important condition which limits the application of the theory is noted; namely, that the pressure coefficient on the surface not fall to zero. The theory is then applied to cones and to bodies whose shape is $r = x$ to the n th power.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605095

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RUSSIAN FUTURE: IS A NEW OPTIMISM JUSTIFIED,

Personal Author(s):

TUCKER,Robert C

Report Date:

20 Sep 1956

Media Count:

20 Page(s)

Report Number(s):

P-945

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Khrushchev's expose of the Stalin tyranny at the Twentieth Party Congress, the ensuing campaign of De-Stalinization and their effect on Western attitudes toward the present situation and prospects in Soviet Russia are examined. The American opinion, under the impact of these events is a prevailing pessimism which has given way to a nascent optimism.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224370

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ALLOCATION OF INDIRECT COSTS.

Personal Author(s):

Fisher, G H

Report Date:

19 Sep 1956

Media Count:

16 Page(s)

Report Number(s):

P511

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605093

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COMBINATION OF TIME SERIES AND CROSSSECTION DATA IN INTERINDUSTRY FLOW ANALYSIS,

Personal Author(s):

Arrow, Kenneth J

Report Date:

18 Sep 1956

Media Count:

12 Page(s)

Report Number(s):

P-942

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A problem which arose in the course of a larger study to explain the variations of input-output ratios over time is considered. (By the input-output ratio of industry 'i' to industry 'j' is meant the ratio of that part of the output of industry 'i' used by industry 'j' to the output of industry 'j'. For such a study, there are two types of data available. For all years, there are available (ideally) outputs and final demands (the final demand for an industry consists of all uses of its product other than in other industries or itself) for all industries. The 'balance equations' of input-output analysis form an (incomplete) system of simultaneous relations which may be estimated by some version of the method of maximum likelihood (for computational reasons, the single-equation limited-information method is the only one likely to be used). However, for some years, additional information is gained in the form of knowing the actual interindustry flows, which clearly should substantially increase the accuracy of the estimates. The simplest technique is, of course, to assume that the 'true' inputoutput ratio for any year for which flow data are available is exactly equal to the observed input-output ratio for that year. The assumption behind this is, however, contradictory to the basic postulate that all the relations involved are valid only up to a stochastic term. It is therefore of interest to consider more explicitly the interindustry flow model implied in the use of both time series and interindustry flow data for estimating the parameters involved. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605090

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SYSTEMATIC APPROACH TO A CLASS OF PROBLEMS IN THE THEORY OF NOISE AND OTHER
RANDOM PHENOMENA. III. EXAMPLES,

Personal Author(s):

Siegert,A J F

Report Date:

17 Sep 1956

Media Count:

40 Page(s)

Report Number(s):

P-939

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605089

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE EXPANSIONS OF SOME INFINITE PRODUCTS,

Personal Author(s):

Bellman,Richard

Report Date:

14 Sep 1956

Media Count:

8 Page(s)

Report Number(s):

P-938

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605011

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME QUEUING PROBLEMS IN MACHINE MAINTENANCE,

Personal Author(s):

Stoller,D S

Report Date:

12 Sep 1956

Media Count:

10 Page(s)

Report Number(s):

P-819

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses some queuing problems that arise in the context of the maintenance of a group of machines, each of which is operated intermittently, and all of which are subject to several kinds of malfunctions. A general form of this problem is made and the general method of solution indicated. A class of solutions in form suitable for direct computations is given. As a special case, a solution is given to the case of m sub j repairmen of type j , $j = 1, \dots, k$ for a group of fully utilized machines. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605088

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF THE MILITARY IN POST-STALIN SOVIET POLITICS,

Personal Author(s):

Garthoff,Raymond L

Report Date:

12 Sep 1956

Media Count:

24 Page(s)

Report Number(s):

P-937

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The death of Stalin, which ushered in a new era in Soviet history, and its effect on the military are discussed. The particular causes of the shift in the role of the military in Soviet affairs, increasing the political status and influence of the military leadership, are examined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605086

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SEQUENTIAL MINIMAX SEARCH FOR A ZERO OF A CONVEX FUNCTION,

Personal Author(s):

Gross,O

Johnson,S M

Report Date:

11 Sep 1956

Media Count:

24 Page(s)

Report Number(s):

P-935

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Given: a positive and a negative value of a function at two given points respectively. The function is continuous and convex and is otherwise unknown but computable. Starting with this information, a procedure is described for locating its unique root (on the starting interval) within an interval of minimum guaranteeable length in n steps, where a step consists of calculating the value of the function at any point we choose. The pertinent functional equation is derived and curves of the objective function are plotted for n = 1, 2, 3, 4 from data obtained from the Johniac, RAND'S Princeton-type high-speed digital computer. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605107

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EXPERIMENT IN SYMBOLIC WORK ON THE IBM 704,

Personal Author(s):

Kemeny, John G

Report Date:

07 Sep 1956

Media Count:

20 Page(s)

Report Number(s):

P-966

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The question as to the availability of a computing machine that is suitable for symbolic work is raised. The present experiment is designed to demonstrate that the 704 is suitable for at least certain types of symbolic problems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604459

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Asymptotic Expansions for the Distribution of Maximum Deviations in the Bernoulli Scheme,

Personal Author(s):

Korolyuk, V S

Report Date:

07 Sep 1956

Media Count:

8 Page(s)

Report Number(s):

T-66

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method of construction of asymptotic expansions for the distribution functions of maximum deviations of sums of independent random variables is presented. This method also can be applied to more general schemes, for instance, in the case of lattice random variables and random variables having a density function.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605085

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYTIC SOLUTION OF THE WAREHOUSE PROBLEM,

Personal Author(s):

Dreyfus,Stuart E

Report Date:

06 Sep 1956

Media Count:

10 Page(s)

Report Number(s):

P-932

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper uses dynamic programming to establish a computational algorithm for the solution of the 'warehouse' problem and shows that the structure of the solution can be determined analytically, with numerical results easily obtained via recursive formulas.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0112380

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BATTLEFIELD INTELLIGENCE IN WORLD WAR II. A CASE STUDY OF THE FIFTH ARMY FRONT IN ITALY

Personal Author(s):

TANHAM, G K

Report Date:

Sep 1956

Media Count:

1 Page(s)

Contract Number:

AF 33-038-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0144264

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DYNAMIC PROGRAMMING

Personal Author(s):

BELLMAN, RICHARD

Report Date:

Sep 1956

Media Count:

342 Page(s)

Report Number(s):

R-295

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605084

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RESONANCE ESCAPE PROBABILITY IN NATURAL URANIUM AND H2O - D2O MIXTURES,

Personal Author(s):

Safonov,George

Report Date:

30 Aug 1956

Media Count:

18 Page(s)

Report Number(s):

P-931

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) RAND was engaged in a rather broad theoretical survey of homogeneous water-uranium reactors. The aim was to explore the critical nuclear parameters of simple oneregion systems consisting of all those mixtures of the four ingredients, U235, U238, H2O and D2O, which may sustain a chain reaction. The end product was to be a series of maps which show the relative characteristics of the spectrum of water-uranium systems. This article describes part of the program. The calculational scheme employed, a review of rationalizations made, and some resonance escape results for mixtures of natural uranium and water with varying amounts of light and heavy components are given.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0605082
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) GRADIENT METHODS FOR CONSTRAINED MAXIMA,
Personal Author(s):
Arrow,K J
Hurwicz,L
Report Date:
28 Aug 1956
Media Count:
14 Page(s)
Report Number(s):
P-928
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0606299
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) RELATIONSHIPS BETWEEN WEAPONS AND LOGISTICS EXPENDITURES,
Personal Author(s):
Geisler,Murray A
Report Date:
28 Aug 1956
Media Count:
9 Page(s)
Report Number(s):
P-1036
Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses the trade-offs which are always made -- implicitly or explicitly -- between investing in a weapon and in its logistics support. The importance of some well-known general relationships are considered: (1) A weapons system, its supply support, and its maintenance support are all one package and for many management purposes should be considered together. (2) The number of operationally-ready aircraft sometimes may possibly be increased more economically by devoting additional resources to supply or maintenance support rather than by buying additional units of the end item. (3) Similarly, shifting resources between supply and maintenance could be a means of increasing the operationally ready inventory. (4) In managing a weapon, Standards should not be set for one logistics activity without regard to the others. For example, with a fixed budget, an effort to reduce the AOCP rate too far may so impinge on maintenance resources as to reduce the number of operationally ready weapons. The opposite is also possible. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605791

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On a Local Limit Theorem for Inhomogenous Markov Chains,

Personal Author(s):

Statulyavicus, V A

Report Date:

25 Aug 1956

Media Count:

8 Page(s)

Report Number(s):

T-67

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605080

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRINTING AND CHECKING FOR LINEAR PROGRAMMING CODES,

Personal Author(s):

Judd,H A

Report Date:

23 Aug 1956

Media Count:

28 Page(s)

Report Number(s):

P-925

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422842

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NETWORK FLOW THEORY,

Personal Author(s):

Ford,L R ,Jr

Report Date:

14 Aug 1956

Media Count:

12 Page(s)

Report Number(s):

P923

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Abstract:

(U) The labeling algorithm for the solution of maximal network flow problems and its application to various problems of the transportation type are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605078

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IS 'DUAL' PREPAREDNESS MORE EXPENSIVE,

Personal Author(s):

Hoag,Malcolm W

Report Date:

14 Aug 1956

Media Count:

10 Page(s)

Report Number(s):

P-922

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The current debate over military budgets is discussed. The desirability of dual preparedness (the ability to fight limited wars without the superbomb as well as the ability to retaliate overwhelmingly with it) is considered. Claims that great political advantages accrue from being able to fight limited wars with old-fashioned means are examined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605076

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE MECHANISM OF FATIGUE. A DISCUSSION OF A PAPER BY THOMPSON, WADSWORTH, AND LOUAT, PHILOSOPHICAL MAGAZINE, FEBRUARY, 1956,

Personal Author(s):

Shanley,F R

Report Date:

09 Aug 1956

Media Count:

10 Page(s)

Report Number(s):

P-920

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605073

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COMPLETE DUALIZED SYSTEM OF THE SIMPLEX METHOD,

Personal Author(s):

Hays,William Orchard-

Report Date:

09 Aug 1956

Media Count:

16 Page(s)

Report Number(s):

P-916

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The augmented tableau of the revised simplex method is further augmented to display all relationships involved. The simplex method is applied to the dual system to solve the primal system starting from a solution which is feasible for the dual. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605072

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PREPARATION OF INPUT FOR THE LINEAR PROGRAMMING CODE,

Personal Author(s):

Judd,H A

Report Date:

07 Aug 1956

Media Count:

12 Page(s)

Report Number(s):

P-914

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper describes the format of alphabetic and decimal input cards, their loading sequence and the resulting output of the Data Assembly code. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605070

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE REVISED SIMPLEX METHOD,

Personal Author(s):

Orchard-Hayes,William

Report Date:

06 Aug 1956

Media Count:

30 Page(s)

Report Number(s):

P-911

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A revision of the simplex method is presented which makes explicit use of columns of the restraint coefficients associated with a basic set of variables. The development is based on the single assumption of linearly independent restraint equations. An algebraic method of resolving degeneracy is given in conclusion. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605068

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPERATING THE LINEAR PROGRAMMING CODES,

Personal Author(s):

Cutler, Leola

Report Date:

01 Aug 1956

Media Count:

28 Page(s)

Report Number(s):

P-909

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A general code for solving linear programming problems needs a standardized operating procedure. The current method of operation has evolved from the experience of running many problems. The checks used and the types of error that can be expected are explained. In addition, the way to resume computing after machine or problem error has occurred is discussed. It is shown that with adequate written instructions the problems can be run on the high-speed computer by any machine operator. Major decisions are left to the problem formulator. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605067

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ADAPTABILITY OF THE LINEAR PROGRAMMING CODES,

Personal Author(s):

Orchard-Hays, William

Report Date:

01 Aug 1956

Media Count:

22 Page(s)

Report Number(s):

P-908

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The operation of an elaborate set of computer codes raises problems of its own which can only be appreciated from experience. Nevertheless, certain general principles for designing such a system can be set forth. The activities which are engaged in during the evolution of such a system are not simple sequence of events but there is feedback from later steps to earlier ones. How easily the resulting changes can be handled is dependent on the organization of the codes and on the assembly program used. An appendix discusses some shortcomings of the latter together with suggested improvements.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605051

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WEAPONS SYSTEM PHILOSOPHY,

Personal Author(s):

Clement, George H

Report Date:

27 Jul 1956

Media Count:

20 Page(s)

Report Number(s):

P-880

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The weapons system philosophy is discussed as a point of view embracing a technique for ordering, classifying and analyzing a technologically complex mechanism, organization or process. Each element and each problem is considered in its proper context so that the objectives of the system as a whole may be realized with a minimal expenditure of resources. The philosophy is considered to be a powerful tool aiding in the design, development and management of military weapons systems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605066

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE STORAGE ALLOCATION OF THE LINEAR PROGRAMMING CODE,

Personal Author(s):

Judd,H A

Report Date:

26 Jul 1956

Media Count:

14 Page(s)

Report Number(s):

P-907

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The handling of storage assignment and subroutine interconnections for the 704 linear programming codes are discussed. The available storage of the machine is divided into two main parts -- code and data. Their layouts re fairly independent of one another and the programs include routines for automatic 'housekeeping' during loading and running of a job. Flexibility is provided for systematic modifications in the programs or for machines with various storage facilities. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605065

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A CLASS OF FUNCTIONAL EQUATIONS OF MODULAR TYPE,

Personal Author(s):

Bellman,Richard

Report Date:

16 Jul 1956

Media Count:

10 Page(s)

Report Number(s):

P-903

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to show how the Voronoi functions and their analogues in algebraic number fields, matric fields, and finite fields, can be used to generate large classes of functions possessing functional equations of modular type. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605060

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DISARMAMENT FAILURE AND WEAPONS LIMITATIONS,

Personal Author(s):

DEWeerd,H A

Report Date:

16 Jul 1956

Media Count:

22 Page(s)

Report Number(s):

P-896

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The American goal of complete nuclear disarmament is discussed. The major American proposals in the field of nuclear disarmament and limitations since 1946 are reviewed, and the causes for the failure of these proposals are examined. A policy of limitations on the use of nuclear weapons is suggested.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422840

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE LOGIC THEORY MACHINE A COMPLEX INFORMATION PROCESSING SYSTEM,

Personal Author(s):

Newell,Allen
Simon,Herbert A

Report Date:

12 Jul 1956

Media Count:

63 Page(s)

Report Number(s):

P868

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

22 - DOCUMENT ILLEGIBLE

Abstract:

(U) A complex information processing system is described; it is called the logic theory machine and is capable of discovering proofs for theorems in symbolic logic. This system, in contrast to the systematic algorithms that are ordinarily employed in computation, relies heavily on heuristic methods similar to those that have been observed in human problem solving activity. The specification is written in a formal language, of the nature of a pseudo-code, that is suitable for coding for digital computers. The logic theory machine is part of a program of research to understand complex information processing systems by specifying and synthesizing a substantial variety of such systems for empirical study. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605061

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ATMOSPHERIC TRANSMISSION,

Personal Author(s):

Passman,Sidney

Larmore,Lewis

Report Date:

11 Jul 1956

Media Count:

20 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Values of the water vapor error function absorption coefficients are given for infrared radiation in the wavelength region from 1.4 microns to 5.9 microns. These values correct the data of L. Larmore IRIS Proceedings, Vol. I, No. 1, p. 14, so as to agree with the implications of certain subsequent experimental data. The resultant actual transmission values were recalculated for these revised coefficients for various amounts of precipitable water vapor and are given as a function of wavelength in the 1.4 to 5.9 micron region in 0.1 micron intervals.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605059

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VARIATION OF THE AMPLITUDE OF THERMAL VIBRATION ON THE FUSION CURVE,

Personal Author(s):

Gilvarry,J J

Report Date:

11 Jul 1956

Media Count:

22 Page(s)

Report Number(s):

P-894

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A differential relation, which is equivalent to the DebyeWaller identification of the Debye and Lindemann frequencies at fusion, is generalized to take into account variation along the fusion curve of

the critical ratio of the rootmean-square amplitude of thermal vibration to the nearestneighbor distance of the atoms in the solid at fusion. Thus extended, the theory yields an expression for the Gruneisen parameter of a solid at fusion in terms of fusion parameters and the rate of change of the critical ratio with respect to volume, which is valid for elements whose fusion curves have either normal or abnormal slopes. Values of derivatives of the critical ratio with respect to volume, temperature, and pressure at fusion are obtained for 16 elements. The results yield evaluations of the change in the critical ratio along the experimentally determined fusion curves for three alkali metals, and permit estimates in other cases. It is concluded that the assumption of a fixed Lindemann constant along the fusion curve of a particular element represents an excellent approximation, in general, for elements with normal fusion curves (for the case of classical excitation of the lattice vibrations). The same conclusion is obtained, within certain approximations, from the order-disorder theory of Lennard-Jones and Devonshire for the melting process, and the theory of Fisher for stability of the liquid phase. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605056

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HITCHCOCK TRANSPORTATION PROBLEM,

Personal Author(s):

Fulkerson,D R

Report Date:

09 Jul 1956

Media Count:

30 Page(s)

Report Number(s):

P-890

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An exposition of the simplex computation for transportation type problems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605057

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CENTRAL MATHEMATICAL PROBLEM,

Personal Author(s):

Dantzig,G B

Report Date:

09 Jul 1956

Media Count:

22 Page(s)

Report Number(s):

P-892

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Symbols are introduced to distinguish various activities, items, the assumed constant flows and costs (or profits) per unit level of activity, the activity levels and the quantities of demand or availability of various items. The central problem is then stated in standard algebraic form. It is shown that the problem of minimizing a linear form where the unknowns satisfy a system of equations in non-negative variables is equivalent to one where the variables satisfy a system of linear inequalities. It is stated without proof that an optimizing solution belongs to a class of feasible solutions that 'involve' no more variables than equations. The simplex method is illustrated by showing for this class a way of testing the optimality of a solution and constructing a sequence of improved feasible solutions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605058

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FORMULATING A LINEAR PROGRAMMING MODEL,

Personal Author(s):

Dantzig,G B

Report Date:

09 Jul 1956

Media Count:

22 Page(s)

Report Number(s):

P-893

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A simplified oil refinery example is used to illustrate the principles of building a linear programming model. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422843

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SIMPLEX METHOD,

Personal Author(s):

Dantzig,G B

Report Date:

09 Jul 1956

Media Count:

29 Page(s)

Report Number(s):

P891

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The simplex method of solution of a linear program first transforms the original system to an equivalent system of m equations in canonical form by an elimination of m of the n unknowns. If the right choice of m variables is made, then by equating the remaining variables to zero, an optimal solution is obtained to the original problem. If not, the method produces an improved set of m variables and a corresponding canonical form. The procedure is iterated until an optimum solution is obtained.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605055

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SOLUTION CONTAINING AN ARBITRARY CLOSED COMPONENT,

Personal Author(s):

Shapley,Lloyd S

Report Date:

03 Jul 1956

Media Count:

12 Page(s)

Report Number(s):

P-888

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An n-person game solution is constructed around an arbitrary closed set, showing that there is practically no limit to the possible complexity of solutions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0491451

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/491451.pdf

Size: 833 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD491451>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PHYSICAL RECOVERY OF SATELLITE PAYLOADS - A PRELIMINARY INVESTIGATION

Personal Author(s):

Huntzicker, J H

Lieske, H A

Report Date:

26 Jun 1956

Media Count:

38 Page(s)

Report Number(s):

RM-1811

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The development of a method for recovering certain items intact from a reconnaissance satellite is investigated. The investigation of recovery of a satellite payload was contingent upon three conditions: The trajectory of the orbiting pay load must be modified so that it will intersect the earth's surface at a specified time and location. Payload items must be protected from aerodynamic heating during re-entry into the earth's atmosphere. The payload must be located and retrieved promptly after it impacts.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422844

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLICY OBJECTIVES AND MILITARY ACTION IN THE KOREAN WAR,

Personal Author(s):

Kaufmann,William W

Report Date:

26 Jun 1956

Media Count:

32 Page(s)

Report Number(s):

P886

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605050

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE REGLE DU JEU OF THE FRENCH PARLIAMENT: AS EXEMPLIFIED IN THE ELECTION OF PRESIDENT COTY,

Personal Author(s):

Leites,Nathan

Melnik,Constantin

Report Date:

22 Jun 1956

Media Count:

22 Page(s)

Report Number(s):

P-878-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An analysis of the spirit of contemporary French politics is presented. One important and complicated parliamentary event, the session of the Congress (that is, the combined National Assembly and Council of the Republic) in Versailles, from December 17 to 23, 1953, which resulted in the election of Monsieur Rene Coty to the Presidency of the Republic is studied. The impact of predictions of electoral success and failure on the actual voting is discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605042

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BIRTH-DEATH PROCESSES AND TANDEM QUEUES,

Personal Author(s):

Reich,E

Report Date:

22 Jun 1956

Media Count:

6 Page(s)

Report Number(s):

P-863

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This work points out a simple property of stationary birth and death processes, which implies that for certain queues, the output process is closely related to the input process. This is applied to a situation where customers proceed to a second queue after having been processed at a first queue.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605053

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF LINEAR PROGRAMMING AND DYNAMIC PROGRAMMING,

Personal Author(s):

Dreyfus,Stuart E

Report Date:

22 Jun 1956

Media Count:

16 Page(s)

Report Number(s):

P-885

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper considers the applications and interrelations of linear and dynamic programming and attempts to place each in a proper perspective so that efficient use can be made of the two techniques.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605052

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELASTIC STRESSES PRODUCED IN A HALF PLANE BY STEADILY MOVING LOADS,

Personal Author(s):

Cole,J D

Huth,J H

Report Date:

21 Jun 1956

Media Count:

38 Page(s)

Report Number(s):

P-884

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A study is made of stresses and displacements induced in an elastic half plane (plane strain) by a concentrated lineload moving at a constant speed along its surface. The stress field for an arbitrary load distribution can be built up by superposition of these concentrated load solutions. Three cases are considered: the load is moving more slowly than either the longitudinal or transversal wave speeds of the elastic medium (subsonic case), the load speed is between the two wave speeds (transonic case), the load speed is greater than either wave speed (supersonic case). In each of these cases the nature of the singularity caused by the load is examined and the complete solution is given. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0267766

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ARTIFICIAL SATELLITES OF THE MOON

Personal Author(s):

BUCHHEIM,ROBERT W

Report Date:

14 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605047

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TEMPERATURES IN THE EARTH'S INTERIOR,

Personal Author(s):

Gilvarry,J J

Report Date:

06 Jun 1956

Media Count:

22 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Fusion temperatures are evaluated for the earth's mantle from Lindemann's law, by use of elastic parameters determined for a given depth from seismic data. The results are substantially consistent with prediction from the Simon equation, on the basis of a theoretical evaluation of the Simon exponent. The same formulation of the Simon equation is used to obtain fusion temperatures for the core. No inconsistency with these values is shown by deductions from Lindemann's law for the outer core. The melting temperatures found for the core are considerably higher than those predicted by Simon or Bullard, and show no substantial conflict with Jacobs' hypothesis on the origin of a solid inner core. By using data on the temperature in the earth at small depth, and limits imposed on the possible values by melting temperatures at large depth, the actual temperature in the earth is represented approximately by a quartic polynomial in the depth; the limit of error at large depth if the inner core is solid estimated as = 25 percent. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

ADD501418

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CORRECTION TO ATMOSPHERIC TRANSMISSION TABLES IN PROCEEDINGS OF INFRARED INFORMATION SYMPOSIUM, VOL 1, NO 2, P15-17

Personal Author(s):

PASSMANN,S

Report Date:

Jun 1956

Media Count:

3 Page(s)

Report Number(s):

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

NL

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605046

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BERYLLIUM AS AN AIRCRAFT STRUCTURAL MATERIAL,

Personal Author(s):

Hoffman,George A

Report Date:

28 May 1956

Media Count:

36 Page(s)

Report Number(s):

P-871

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Aircraft structures made of various metallic elements are compared according to relative weight, and the lightest structure is shown to be made of beryllium. The properties of beryllium are used to evaluate its efficiency in structural components, and beryllium structures are shown to weigh about half as much as conventional structures. An example is given of the advantages that may be obtained by using beryllium in transport airplanes. The deterrents to the use of beryllium are listed and the problem of brittleness is discussed. The paper concludes with suggestions for research. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605038

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PACT-1A,

Personal Author(s):

Steel,T B ,Jr

Report Date:

25 May 1956

Media Count:

8 Page(s)

Report Number(s):

P-857-AD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A brief description of the Project for the Advancement of Coding Technique on the construction of a compiler for the IBM 704.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605035

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET ATOMIC POLICY,

Personal Author(s):

Ruggles,Melville J

Kramish,Arnold

Report Date:

23 May 1956

Media Count:

16 Page(s)

Report Number(s):

P-853

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The early history of nuclear research and development in the USSR is discussed. Soviet policy regarding disarmament, publicity, and military potential involving nuclear weapons is considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605044

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND LAGRANGE MULTIPLIERS,

Personal Author(s):

Bellman,Richard

Report Date:

21 May 1956

Media Count:

8 Page(s)

Report Number(s):

P-869

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper it is shown that a combination of the classical Lagrange multiplier formalism and the functional equation technique of dynamic programming enables a number of types of variational problems involving the computation and tabulation of functions of M variables to be treated by computing first sequences of functions of K variables, and then sequences of functions of M--K variables, where K may be chosen within the range $1 \leq K \leq M-1$. The choice of K depends upon the process. This reduction in the dimensionality of the functions involved is equivalent to an increase in the capability of modern digital computers as far as dynamic programming processes are concerned.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605045

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROFESSOR KOOPMAN ON FALLACIES, A COMMENT,

Personal Author(s):

Hitch, Charles

Report Date:

21 May 1956

Media Count:

10 Page(s)

Report Number(s):

P-870

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This comment followed Professor Koopman's address on 'Fallacies in Operations Research' at the fourth annual meeting of the Operations Research Society of America. It involves the difficult problem of choosing appropriate criteria by the operations researcher and the need for developing theory as a guide to criteria selection.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605043

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A DYNAMIC PROGRAMMING APPROACH TO THE CATERER PROBLEM I,

Personal Author(s):

Bellman, Richard

Report Date:

17 May 1956

Media Count:

20 Page(s)

Report Number(s):

P-866

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper, it is shown that the 'caterer' problem, a problem in mathematical economics and logistics which has been discussed by Jacobs, Gaddum, Hoffman and Sokolowsky, and Prager, can be reduced to the problem of determining the maximum of a linear form subject to a series of constraints. This maximization problem is solved explicitly, using the functional equation technique of dynamic programming.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605026

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MANUAL FOR THE RAND-IBM CODE FOR LINEAR PROGRAMMING ON THE 704,

Personal Author(s):

Orchard-Hays, William

Cutler, Leola

Judd, Harold

Report Date:

16 May 1956

Media Count:

62 Page(s)

Report Number(s):

P-842

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A linear programming system which is the modified simplex procedure with the product form of inverse is discussed. It is designed to solve the classical linear inequalities problem and most of its variations on the IBM 704. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604397

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A LINEAR PROGRAMMING MODEL OF THE U. S. PETROLEUM REFINING INDUSTRY,

Personal Author(s):

Manne, Alan S

Report Date:

16 May 1956

Media Count:

85 Page(s)

Report Number(s):

P-563

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper reports upon the construction of one of a series of process analysis models that are being developed for the United States economy. The general purpose of these studies is to give numerical answers to questions about production capability, and at the same time to take account of potential substitutions between alternative production processes.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604972

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PRIMAL--DUAL ALGORITHM,

Personal Author(s):

Dantzig,G B

Ford,L R ,Jr

Fulkerson,D R

Report Date:

09 May 1956

Media Count:

18 Page(s)

Report Number(s):

P-778

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The procedure developed by two of the authors (Ford and Fulkerson) for solving transportation problems is a natural extension of the Kuhn-Egervary method for solving assignment problems. In the present paper the procedure is extended further to the general linear programming case. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605039

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL EQUATIONS IN THE THEORY OF DYNAMIC PROGRAMMING VII: AN INTEGRODIFFERENTIAL EQUATION FOR THE FREDHOLM RESOLVENT,

Personal Author(s):

Bellman, Richard

Report Date:

07 May 1956

Media Count:

10 Page(s)

Report Number(s):

P-859

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605040

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RAND RESEARCH ON A DATA-PROCESSING SYSTEM FOR THE UNITED STATES AIR FORCE,

Personal Author(s):

Geisler, Murray A

Report Date:

07 May 1956

Media Count:

16 Page(s)

Report Number(s):

P-860

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A description is given of a data processing system for use by the Air Force in inventory control.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224385

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/224385.pdf

Size: 238 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD224385>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BEST EXPLORATION FOR MAXIMUM IS FIBONACCIAN

Personal Author(s):

Johnson, Selmer M

Report Date:

04 May 1956

Media Count:

13 Page(s)

Report Number(s):

P856

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A unimodel function of one variable is defined on an interval. No regularity conditions involving continuity, derivatives, etc., are assumed. We wish to minimize the number of calculations of values of the function in order to assure the location of its maximum to a prescribed degree of accuracy. The solution of this problem and its discrete analogue involves the well-known Fibonacci sequence.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605037

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AIR FORCE LOGISTICS: SOME RECENT DEVELOPMENTS,

Personal Author(s):

Ferguson,Allen R

Report Date:

03 May 1956

Media Count:

32 Page(s)

Report Number(s):

P-855

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some aspects of Air Force logistics in which important new developments are underway are described. The increasing reliance upon airlift and other problems whose solution will largely determine the logistics posture of the Air Force in the next decade are discussed. The military environment and the functions of the logistics system in the early 1960's are outlined. The developments discussed are steps in making the logistics system capable of performing its functions in that environment, namely: introduction of improved logistics policies, the role of airlift, and how to maintain control over Air Force assets.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605036

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AMPLITUDES OF THERMAL VIBRATION AT FUSION,

Personal Author(s):

Gilvarry,J J

Report Date:

01 May 1956

Media Count:

16 Page(s)

Report Number(s):

P-854

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) On the basis of theoretical results from the Debye-Waller theory of the thermal dependence of x-ray reflection intensity, relatively accurate values of the Lindemann constant are determined for ten metals by use of rigidity moduli at fusion with previously determined bulk moduli. Agreement of the derived value, ρ , of the critical ratio of rootmean-square amplitude of thermal vibration to nearestneighbor distance at fusion, with the corresponding value from x-ray intensity data, is improved for the case (Al) favorable for comparison. The average value of ρ over the body-centered cubic, face-centered cubic,

and hexagonal lattice types is 0-11 sub 1 in excellent agreement with the value 0.10 sub 5 given by Gruneisen. Relatively accurate values of the Lindemann constant for Pb and Al imply that this quantity can not be a strict constant over a lattice type; however, the assumption of an average over the lattice type yields an excellent approximation for the face-centered cubic elements. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605032

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CURRENT DEVELOPMENTS IN COMPLEX INFORMATION PROCESSING,

Personal Author(s):

Newell,Allen

Simon,Herbert A

Report Date:

01 May 1956

Media Count:

38 Page(s)

Report Number(s):

P-850

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion is given of complex information processing; processes which computers perform in complex processing; instructing the computer; and learning and its relation to complex processes.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605033

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLITICAL BEHAVIOR IN A CRISIS; SOME OBSERVATIONS FROM THE BERLIN BLOCKADE,

Personal Author(s):

Davison,W P

Report Date:

30 Apr 1956

Media Count:

24 Page(s)

Report Number(s):

P-851

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Berlin blockade of 1948 is presented as an opportunity to study mass attitudes and mass political behavior in a crisis. It is concluded that knowledge of attitudes is not a sufficient basis on which to predict political behavior.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605031

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ADMINISTRATION OF RESEARCH IN A RESEARCH CORPORATION,

Personal Author(s):

Kennedy,John L

Putt,G H

Report Date:

20 Apr 1956

Media Count:

22 Page(s)

Report Number(s):

P-847

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper describes some organizational problems of the new research corporation from the point of view of a research administrator and a researcher. A tool for improving communication between researcher and administrator is described, and its use in planning a large-scale research program is outlined. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605030

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRIORITY ASSIGNMENT ON A WAITING LINE,

Personal Author(s):

Dressin,S A

Reich,E

Report Date:

19 Apr 1956

Media Count:

8 Page(s)

Report Number(s):

P-846

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605010

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAINTENANCE OF A GROUP OF MACHINES UTILIZED INTERMITTENTLY AND SUBJECT TO SEVERAL TYPES OF MALFUNCTIONS. I. OPERATIONAL REQUIREMENTS AND RESOURCE ALLOCATIONS,

Personal Author(s):

Sewell,W P

Report Date:

19 Apr 1956

Media Count:

10 Page(s)

Report Number(s):

P-818

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Consideration is given to the kinds of modifications of the 'standard' queueing models required to deal with the complex allocation problems involved in cycling aircraft through maintenance with the malfunction and service rates dependent on the number and use of in-commission aircraft.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0609198

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VULNERABILITY OF FUEL STORAGE TANKS TO NUCLEAR BLAST; RESPONSE AND SCALING OF
FLOATING ROOF TANKS,

Personal Author(s):

ELSWICK,W R

Gore,L A

Sandoval,C A

Report Date:

18 Apr 1956

Media Count:

33 Page(s)

Report Number(s):

RM-1677

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The vulnerability of bulk fuel storage is of major concern in the survival of Air Force weapon systems subject to nuclear attacks. The vulnerability of three types of storage tanks is of interest; the underground tank, the floating roof tank with strengthened shell and the ordinary cone roof tank. The floating roof, particularly if placed in a hard shell, presents some obviously interesting characteristics from the point of view of vulnerability. It is capable of withstanding significantly large pressures if the pressures are uniformly distributed. But, if the pressures are nonuniformly distributed and also vary with time, such as those produced by a nuclear blast wave, the floating roof will be displaced and the dynamic response of the liquid under the floating roof will determine the vulnerability of the roof and the contents of the tank. A thorough understanding of these dynamic conditions is necessary before the potential resistance of floating roof tanks can be evaluated or before actual tests can be profitably undertaken.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0101071

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/101071.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD101071>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN INTRODUCTION TO SYSTEMS ANALYSIS

Personal Author(s):

Hoag, Malcolm W

Report Date:

18 Apr 1956

Media Count:

24 Page(s)

Report Number(s):

RAND-RM-1678

XC-ASD

Contract Number:

AF33(038)-6413

Monitor Series:

ASD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605029

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON THE THEORY OF DYNAMIC PROGRAMMING; VIII,

Report Date:

18 Apr 1956

Media Count:

6 Page(s)

Report Number(s):

P-845

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A problem in the study of production smoothing leads to the problem of minimizing a linear form subject to certain constraints. A computational solution of this problem is given, using the methods of dynamic programming.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604983

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND ITS APPLICATION TO VARIATIONAL PROBLEMS IN MATHEMATICAL ECONOMICS,

Personal Author(s):

Bellman, Richard

Report Date:

18 Apr 1956

Media Count:

50 Page(s)

Report Number(s):

P-796

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to discuss some variational problems arising from mathematical economics, and some of the methods that can be used to treat these questions both analytically and computationally. The discussion is limited to important and interesting classes of processes, allocation and smoothing processes, and to a discussion of the application of the theory of dynamic programming to those processes. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605025

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STRATEGY VERSUS TACTICS IN A NUCLEAR AGE,

Personal Author(s):

Brodie, Bernard

Report Date:

16 Apr 1956

Media Count:

28 Page(s)

Report Number(s):

P-841

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605016

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SURFACE-PROTECTION AND COOLING SYSTEMS FOR HIGH-SPEED FLIGHT,

Personal Author(s):

Masson,D J

Gazley,Carl ,Jr

Report Date:

16 Apr 1956

Media Count:

60 Page(s)

Report Number(s):

P-829

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The high velocities proposed for various flight applications pose difficult problems in protecting the surface structure and internal compartments from the effects of severe aerodynamic heating rates. The paper discusses systems for surface protection against transient and continuous heat inputs, corresponding to typical missile and aircraft flight paths. Systems for transient heat loads can consist of heat sinks of various sorts, involving the absorption of heat by virtue of a material's sensible (temperature-rise) heat capacity, latent heat capacity, or chemical heat capacity. For steady-state or slowly varying heat inputs, systems for surface protection and compartment cooling can be either of the passive or active types depending on the flight path and on compartment heat densities. Comparisons are made of various systems for several typical operating conditions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605001

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GAMES WITH PARTIAL INFORMATION,

Personal Author(s):

Scarf,H E

Shapley,L S

Report Date:

13 Apr 1956

Media Count:

28 Page(s)

Report Number(s):

P-797

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Consideration is given to a particular class of games with partial information. Generalized subgames are defined. These subgames give rise to functional equations whose solution permits a recursive construction of the optimal strategies. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422838

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RELEVANCE OF COSTS IN OPERATIONS RESEARCH,

Personal Author(s):

Hoag,Malcolm W

Report Date:

13 Apr 1956

Media Count:

18 Page(s)

Report Number(s):

P820

Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0605024
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) PROPERTIES OF THE SHOCK TRANSITION AT LOW TEMPERATURE,
Personal Author(s):
Gilvarry,J J
Report Date:
12 Apr 1956
Media Count:
16 Page(s)
Report Number(s):
P-840
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Bethe's equation for the change of entropy in waves of finite amplitude is shown to be inapplicable for an initial state of temperature arbitrarily close to absolute zero for a substance possessing a zero-point pressure (or energy). Thermodynamic functions for such a substance at low temperature are formulated in general terms applicable to the Fermi-Dirac gas, the Thomas-Fermi atom, the Debye solid, and the Mie-Gruneisen solid as special cases. The conditions under which the equation of state satisfies the Bethe-Weyl conditions are given. Of the usual four basic properties of the shock transition under the Bethe-Weyl conditions, two must be modified for the class of substances in question, for an initial state arbitrarily close to zero temperature. The argument follows from extension of Bethe's method, by Taylor expansion of the Hugoniot function about the initial state. The results are shown to be consistent with Weyl's procedure. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604952

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAXIMUM ANGULAR ACCURACY OF A PULSED SEARCH RADAR,

Personal Author(s):

Swerling,P

Report Date:

10 Apr 1956

Media Count:

40 Page(s)

Report Number(s):

P-745

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An investigation is made of the limits imposed by receiver noise on the accuracy with which the angular position of a target can be determined by a pulsed search radar. Using a result in the theory of statistical estimation, a lower bound is derived for the standard deviation of regular unbiased estimates of target angular position, for a large class of methods of angular position determination; the lower bound depends on scan rate, pulse repetition rate, beamwidth, beam shape, and signal-to-noise ratio. A similar analysis is made of the limits on angular accuracy imposed by a combination of receiver noise and one particular type of target cross section fluctuation. Operations which can be performed on the received signal to form an estimate of target angular position, the standard deviation of which approximately attains the theoretical lower bound, are discussed. The relation between the estimation of angular position and the problem of target detection is discussed. A graphical presentation of the main results is given. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605023

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE PRINCIPLE OF INVARIANT IMBEDDING AND PROPAGATION THROUGH INHOMOGENEOUS MEDIA,

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Report Date:

10 Apr 1956

Media Count:

10 Page(s)

Report Number(s):

P-839

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to present a new technique for the study of propagation through inhomogeneous and random media, based upon an invariance principle which is called the 'principle of invariant imbedding.' As an application, consideration is given to the problem of the scattering of light by an inhomogeneous medium of finite depth. The corresponding problem for homogeneous media was treated by Ambarzumian and Chandrasekhar. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605020

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE IMPACT OF LARGE METEORITES,

Personal Author(s):

Gilvarry,J J

Hill,J E

Report Date:

03 Apr 1956

Media Count:

34 Page(s)

Report Number(s):

P-836

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The impact of large meteorites on the moon or earth is discussed, on the basis of a one-dimensional idealization of the flow problem in which a plane shock wave in both meteorite and impact surface is considered. Conditions are discussed under which such a model can yield physically valid estimates of pressure and temperature generated on explosive impact of meteorites. Computations are carried out for an equation of state and internal energy from the statistical Thomas-Fermi atom model; departures from complete degeneracy are taken into account by means of results of a first-order perturbation with respect to temperature.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605021

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MULTI-DIMENSIONAL MAXIMIZATION, DYNAMIC PROGRAMMING AND ECONOMIC LOT SIZE,

Personal Author(s):

Bellman,Richard

Report Date:

03 Apr 1956

Media Count:

22 Page(s)

Report Number(s):

P-837

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that some problems arising in the determination of economic lot size lead to the analytic problem of determining the maximum of a certain function subject to a number of constraints. These problems are reduced to the determination of a sequence of functions via the functional equation approach of the theory of dynamic programming.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0608315

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WEST GERMAN TRADE UNIONS: THEIR DOMESTIC AND FOREIGN POLICIES,

Personal Author(s):

Kirchheimer,Otto

Report Date:

01 Apr 1956

Media Count:

168 Page(s)

Report Number(s):

RM-1673-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) German unions, though numerically strong and presently operating under favorable conditions, are facing a number of handicaps. They suffer from a lack of dynamic leadership, and are weighted down by the burdens of the German political past. Both German tradition and present power configurations serve to make the unions insecure about their place in the present governmental setup. Consequently, they try to operate both as representatives of labor in the context of present-day capitalist institutions, and as a force seeking to add economic to political democracy. They consider labor as the only true custodian of democracy, and they mistrust both the state apparatus and their industrial opposite numbers. Their relations with both suffer from the fact that, in Germany, political notions evolving around the state as a repressive authority never yielded to concepts of the state as a dynamic expression of community life with ample latitude for divergent political and social forces.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0101000

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPLICATION OF DYNAMIC PROGRAMMING TO THE AIRPLANE MINIMUM TIME-TO-CLIMB PROBLEM

Personal Author(s):

CARTAINO,T F

DREYFUS,S E

Report Date:

22 Mar 1956

Media Count:

17 Page(s)

Report Number(s):

RM-1710

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604708

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL EQUATIONS IN THE THEORY OF DYNAMIC PROGRAMMING: III: MULTI-STAGE GAMES,

Personal Author(s):

Bellman, Richard

Report Date:

14 Mar 1956

Media Count:

33 Page(s)

Report Number(s):

P-676

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper establishes existence and uniqueness theorems for a class of functional equations occurring in the theory of multi-stage games. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605012

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON EXPLICIT SOLUTIONS OF SOME TRINOMIAL EQUATIONS IN TERMS OF THE MAXIMUM OPERATION,

Report Date:

14 Mar 1956

Media Count:

8 Page(s)

Report Number(s):

P-821

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper it is shown that the nonnegative solutions of trinomial equations of the form $\phi(x) + ax = b$ may be expressed in terms of the maximum or minimum of explicit functions, provided that $\phi(x)$ is strictly convex or strictly concave. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224381

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EVOLUTION OF COMPUTER CODES FOR LINEAR PROGRAMMING.

Personal Author(s):

Hayes, William Orchard

Report Date:

14 Mar 1956

Media Count:

50 Page(s)

Report Number(s):

P810

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605003

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/605003.pdf

Size: 356 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD605003>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A THEORY OF ORGANIZATIONAL BEHAVIOR DERIVING FROM SYSTEMS RESEARCH LABORATORY STUDIES

Personal Author(s):

Chapman, Robert L

Report Date:

12 Mar 1956

Media Count:

11 Page(s)

Report Number(s):

RAND/P-802

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) A model for predicting system effectiveness is presented. The variables concern the task, the state of the system, and the forces set in motion when the system comes into contact with its task. Four salient characteristics of the model are pointed out: it identifies task change as critical, it includes crew learning, it identifies the adaptation process as an adjustment cycle, and it describes system state in terms of qualities of the system as a whole. How this model provides criteria for the contributions of human engineering, training, and personnel selection is illustrated by three techniques for improving

system performance: the analytic teaching method, the find-the-right-procedure method, and the build-organizational-potential method.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605007

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON THE POLITICAL ROLE OF MASS MEETINGS IN A MASS COMMUNICATIONS SOCIETY,

Personal Author(s):

Davison,W P

Report Date:

05 Mar 1956

Media Count:

16 Page(s)

Report Number(s):

P-812

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to present a few observations about the functions of political mass meetings which emerged as a by-product from a larger study of the Berlin blockade and airlift of 1948-49. The data on which these observations are based are of a qualitative nature: interviews made by the author with some 20 political leaders in Berlin, reports on public opinion during the blockade prepared by ten public opinion interviewers, essays on their experiences during the blockade submitted to a Berlin newspaper by 340 Berliners, and published materials from the period.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605008

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE OPTIMUM DISTRIBUTION OF LIFT IN CERTAIN PRISMATIC REGIONS AT SUPERSONIC SPEED,

Personal Author(s):

Willmarth, W W

Report Date:

05 Mar 1956

Media Count:

10 Page(s)

Report Number(s):

P-813

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605013

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THOUGHTS ON LINEAR PROGRAMMING AND AUTOMATION,

Personal Author(s):

Dantzig, George B

Report Date:

02 Mar 1956

Media Count:

34 Page(s)

Report Number(s):

P-824

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper views the developments in linear programming toward greater automation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605009

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STALIN AND THE USES OF PSYCHOLOGY,

Personal Author(s):

Tucker,R C

Report Date:

01 Mar 1956

Media Count:

66 Page(s)

Report Number(s):

P-815

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Certain Soviet ideological trends of recent years are discussed in their relation to the regime's policy in internal affairs. These trends center around the militant revival in Soviet psychology of Pavlov's teachings on the conditioned reflex. The Pavlovian revival, which began in 1949, is examined in connection with various developments in biology, political economy, and other fields, and the entire ideological complex is related to a central policy motivation which is called 'transformism.' The final part of the study is concerned with various indications of a postStalin retreat from transformism and the ideology associated with it.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607186

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PARIS FROM EDC TO WEU,

Personal Author(s):

Leites,Nathan

de la Malene,Christian

Report Date:

01 Mar 1956

Media Count:

192 Page(s)

Report Number(s):

RM-1668-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This study attempts to throw light on the attitudes of French parliamentarians (the Communists excepted) toward the rearmament of Germany -- attitudes that came particularly to the fore during the year that preceded the French ratification of WEU in March, 1955. That year included the rejection of EDC in the summer of 1954, the acceptance of the London Agreements in the fall, and the difficult passage of the Paris Agreements through the National Assembly during the winter. The study does not discuss the frequently hidden and always important influence that was exerted by considerations of economic interest and of domestic policy. It only tries to clarify some of the major attitudes on the manifest problems of French foreign policy that were aroused by the various schemes for German rearmament. It would seem that these attitudes have not always been sufficiently understood. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605006

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/605006.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD605006>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NUCLEAR WEAPONS AND CHANGING STRATEGIC OUTLOOKS

Personal Author(s):

Brodie, Bernard

Report Date:

27 Feb 1956

Media Count:

28 Page(s)

Report Number(s):

RAND/P-811

XD-DASA

Monitor Series:

DASA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0090560

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A CLASS OF DISCRETE-TYPE MINIMIZATION PROBLEMS

Personal Author(s):

GROSS, O

Report Date:

24 Feb 1956

Media Count:

11 Page(s)

Report Number(s):

RM-1644

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605005

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE APPLICATION OF THE THEORY OF DYNAMIC PROGRAMMING TO THE STUDY OF CONTROL PROCESSES,

Personal Author(s):

Bellman, Richard

Report Date:

24 Feb 1956

Media Count:

24 Page(s)

Report Number(s):

P-807

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper the authors indicate the application of the functional equation technique of dynamic programming to the study of some typical control processes arising in the study of electrical and mechanical systems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605022

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECTS OF NEUTRON IRRADIATION ON REACTOR FUEL COMPOSITION AND REACTIVITY.

Descriptive Note:

Lecture notes,

Personal Author(s):

Safonov,G

Report Date:

22 Feb 1956

Media Count:

28 Page(s)

Report Number(s):

P-838

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Topics include: the transmutation chains of nuclear fuel (approximate chains for reactor work, concentrations of chain nuclei as a function of irradiation); effects of irradiation on reactor reactivity (the concept of a 'design' reactor and 'design' operating conditions, the 'reactiveness' of fuel, examples of 'off-design' reactor operation); remarks on feed costs for U235, U238 burners.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605004

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE VALUE OF AIRLIFT IN DEFENSIVE, LOCAL, OR PERIPHERAL WARS AFTER 1960,

Personal Author(s):

Eastman,S E

Report Date:

21 Feb 1956

Media Count:

20 Page(s)

Report Number(s):

P-803

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The value of airlift in the event of war and the establishment of military requirements for intercontinental air transportation are discussed. The example used relates solely to the United States Air Force. The time period selected, sometime after 1960, was chosen because of the long lead times on new transports currently under consideration for procurement by the military, because of the lead time involved in the kind of military operations commented upon, and for reasons of security.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0421653

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ELASTIC HALF SPACE UNDER A MECHANICAL DISTURBANCE OF ITS SURFACE (TWO DIMENSIONAL PROBLEM),

Personal Author(s):

Sauter,Fritz

Lang,H A

Report Date:

17 Feb 1956

Media Count:

20 Page(s)

Report Number(s):

T59

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The two-dimensional propagation of waves is investigated for the case where the medium is an elastic semi-infinite body bounded by a plane surface under an arbitrary (one-dimensional) strain. If the strain is shock-like and concentrated on a line, the result is the expected shock-wave propagation, which has occasionally been observed experimentally, and includes the v. Schmidt's head-wave. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604960

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) USE OF AN ARTIFICIAL SATELLITE IN UPPER AIR RESEARCH,

Personal Author(s):

Kallmann,H K

Kellogg,W W

Report Date:

15 Feb 1956

Media Count:

14 Page(s)

Report Number(s):

P-760

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The principal fields of study and the important knowledge that can be gained from observations made from a satellite involved in the International Geophysical year program are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605027

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CENSORSHIP IN THE USSR; A DOCUMENTED RECORD,

Personal Author(s):

Fainsod,Merle

Report Date:

15 Feb 1956

Media Count:

30 Page(s)

Report Number(s):

P-843-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The devices by which Soviet mass communication media are controlled and the procedures by which censorship is enforced are discussed. The historical development of censorship in the USSR is traced from the mid-1930's to the present.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604961

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYNOPTIC WEATHER OBSERVATIONS FROM EXTREME ALTITUDES,

Personal Author(s):

Greenfield,S M

Report Date:

15 Feb 1956

Media Count:

14 Page(s)

Report Number(s):

P-761

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604921

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE SOLUTION OF DISCRETE PROGRAMMING PROBLEMS,

Personal Author(s):

Markowitz,Harry M

Manne,Alan S

Report Date:

09 Feb 1956

Media Count:

46 Page(s)

Report Number(s):

P-711

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper considers optimization problems in which some or all variables must take on integral values. An ability to solve such problems would be valuable in itself and would also allow handling certain kinds of heretofore intractable 'economies of scale'. An automatic algorithm for solving such problems is not given. A general approach susceptible of individual variations, depending upon the problem and the judgment of the user is presented. Two moderate-size examples are presented to illustrate the method. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0421654

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON CERTAIN UNSTEADY MOTIONS OF A COMPRESSIBLE FLUID,

Personal Author(s):

Sedov,L I

Krieger,F J

Report Date:

03 Feb 1956

Media Count:

36 Page(s)

Report Number(s):

T57

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Exact solutions of the equations for one-dimensional unsteady motion of a compressible fluid are considered in the case of plane waves and motions with cylindrical and spherical symmetry. The solutions are determined by simple procedures based on considerations of the theory of dimensions. In concrete examples it is easy to indicate the arrangements of the problems and the hypotheses leading to solutions of the type obtained. This general method is applied to both linear and nonlinear equations with partial derivatives in the most varied problems of physics and mechanics. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0144275

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CLOSE-IN H-BOMB EFFECTS

Personal Author(s):

BRODE, H L

Report Date:

Feb 1956

Media Count:

35 Page(s)

Report Number(s):

RM-15831-1

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605019

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PHYSICAL PROPERTIES OF THE ATMOSPHERE FROM 90 TO 300 KILOMETERS. PROPOSED
'SPECULATIVE ATMOSPHERE' SUBMITTED TO THE WORKING GROUP ON EXTENSION TO THE U. S.
STANDARD ATMOSPHERE TABLES,

Personal Author(s):

Kallmann,H K

White,W B

Newell,H E ,Jr

Report Date:

Feb 1956

Media Count:

28 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An average model atmosphere is presented for the region between 90 and 300 km. This model is consistent with or depends on the following assumptions: molecular oxygen begins to dissociate appreciably only above 90 km; at around 130 km about 30 per cent of O₂ is still in the undissociated state; molecular nitrogen begins to dissociate above 220 km; the concentration of molecular oxygen and nitrogen decreases with altitude exponentially; the temperature becomes isothermal in the region of the exosphere, approximately above 360 km. All physical quantities were calculated from self-consistent equations as continuous functions of altitude, without assuming any particular form of the temperature gradient. The results show lower temperatures and densities throughout the region of the ionosphere than have been deduced previously. (Author)

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0605002

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPLICATION OF THE BALDWIN CRATER RELATION TO THE SCALING OF EXPLOSION CRATERS,

Personal Author(s):

Hill,J E

Gilvarry,J J

Report Date:

27 Jan 1956

Media Count:

36 Page(s)

Report Number(s):

P-801

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Baldwin has demonstrated that the curve of diameter vs depth for craters due to surface explosions on the earth shows a continuous variation through the analogous curve for the terrestrial meteoritic craters into the corresponding curve for lunar craters; the latter two classes of craters are presumed due to explosions associated with meteoritic impact. The conventional (cube-root) method of scaling dimensions of an explosion crater from a prototype crater for different energy releases, by which diameter and depth are each taken proportional to the $1/3$ power of the energy, is shown to be inconsistent with the empirical Baldwin relation. Two methods for scaling craters due to surface explosions of high energy are developed which are consistent with the Baldwin relation and preserve different features of cube-root scaling; in one the crater volume is taken proportional to energy release, and in the second the scaling exponent for the diameter is set equal to $1/3$. A comparison of the two scaling methods with experimental data is carried out; available data do not permit a choice between the two methods. The results permit one to assign an energy scale to the terrestrial meteoritic and the lunar craters. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604925

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON MATRIX THEORY-IX,

Personal Author(s):

Bellman,Richard

Report Date:

26 Jan 1956

Media Count:

8 Page(s)

Report Number(s):

P-715

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper is concerned with establishing a concavity theorem for power products with the aid of a generalization of an identity of Siegel.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606204

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RUSSIAN ATOMIC AIRPLANE OF THE FUTURE,

Personal Author(s):

Pokrovskii,G I

Report Date:

26 Jan 1956

Media Count:
10 Page(s)
Report Number(s):
T-55
TT-64 71444
Monitor Series:
64 71444
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604982
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A SIMPLE MODEL FOR THE PRODUCTION OF THE NORMAL ELECTROENCEPHALOGRAM,
Personal Author(s):
Kennedy, John L
Emmons, William H
Report Date:
25 Jan 1956
Media Count:
18 Page(s)
Report Number(s):
P-795
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A simple electromechanical theory for the production of the normal electroencephalogram is outlined. The theory requires three sets of conditions in the brain: (1) an electrically-charged state, presumed to arise through chemical oxidation-reduction reactions, (2) a gel mass, with a coefficient of elasticity approximated by commercial gelatin, and (3) a periodic mechanical pulse, to set the gel into

oscillation at its resonant frequency. It is proposed that the interaction of these conditions in the skull produces the oscillating potentials recorded from normal human subjects by standard electroencephalographic equipment. It is further proposed that blocking of the alpha rhythm may be produced by de-tuning the lobes of the brain through changes in blood supply via cortical vasoconstriction and dilation. Some suggestions are made concerning likely sources of mechanical activity which might produce abnormal EEG patterns.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224378

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) WEAPON SYSTEM COST ANALYSIS.

Personal Author(s):

Novick, David

Report Date:

24 Jan 1956

Media Count:

24 Page(s)

Report Number(s):

P-794

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604971

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A GENERALIZATION OF THE FUNDAMENTAL IDENTITY OF WALD,

Personal Author(s):

Bellman, Richard

Report Date:

23 Jan 1956

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper extends the fundamental identity of Wald in the theory of sequential analysis to the case where the variables are Markovian rather than independent. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604959

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN AUTOMATIC SUPERVISOR FOR THE IBM 702,

Personal Author(s):

Moncreiff, Bruse

Report Date:

12 Jan 1956

Media Count:

18 Page(s)

Report Number(s):

P-759

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A description is given of an automatic supervisory routine which is an attempt to solve those operating and programming problems peculiar to the 'routine-dominated' situation of a large commercial data processing center.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604981

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF BASIC INDUSTRIAL PRODUCTS IN THE USSR, 1928-50,

Personal Author(s):

Bergson,Abram

Bernaut,Roman

Turgeon,Lynn

Report Date:

12 Jan 1956

Media Count:

68 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The essay presents some results of an inquiry concerning Soviet industrial price trends for the period 1928-50. The study is one of several that are presently being conducted for various Soviet economic sectors with the common aim to derive index numbers which might be used in the deflation of some recently published current ruble national income data.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604980

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET APPROACH TO INTERNATIONAL POLITICAL COMMUNICATION,

Personal Author(s):

Kecskemeti,Paul

Report Date:

09 Jan 1956

Media Count:

28 Page(s)

Report Number(s):

P-788

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some of the distinguishing features of Soviet political communications are discussed. Certain characteristics of this body of international communications that have remained relatively constant at least since the consolidation of Stalin's dictatorship, in spite of changes in the propaganda line, are described. Some of these relatively constant characteristics have to do with formal properties of the channels through which the communications pass; others, with the role assumed by the communicator toward his audience and the objectives that he seeks to attain. In both these respects, Soviet communications differ considerably from political communications of non-Soviet origin.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604933

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE STABILITY OF A CIRCULAR CYLINDER,

Personal Author(s):

RAYMOND,J L

Garber,T B

Report Date:

09 Jan 1956

Media Count:

28 Page(s)

Report Number(s):

P-723

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper deals with a single-degree-of-freedom motion of a rigid right circular cylinder, namely, rotation about any axis normal to the longitudinal axis. The two selected space orientations are such that in the first case the translational velocity vector and the longitudinal axis form the plane of rotation (end-over-end motion), and in the second case the longitudinal axis lies in the plane of rotation which is always perpendicular to the translational velocity vector. The aerodynamic static and damping stability of the cylinder are first derived for later use in the equations of motion for each of the above-mentioned cases. Rotation of the first type (which may be coined in-plane rotation) is non-linear in nature and depends upon the aerodynamic damping characteristics as well as the initial spin rate, while rotation of the second type (coined normal rotation) is linear and logarithmically damped. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604977

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE IMPACT THEORY OF THE ORIGIN OF LUNAR CRATERS,

Personal Author(s):

Gilvarry,J J

Hill,J E

Report Date:

04 Jan 1956

Media Count:

10 Page(s)

Report Number(s):

P-785

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to present the results of computations on the pressures and temperatures attained in the impact of large meteorites on the lunar surface, based on the equation of state as obtained from the ThomasFermi statistical model of the atom.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604979

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman,Richard

Report Date:

03 Jan 1956

Media Count:

6 Page(s)

Report Number(s):

P-787

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This is a brief description of decision processes in dynamic programming.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604978

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON SCHLIGHT FUNCTIONS WITH REAL COEFFICIENTS,

Personal Author(s):

Reich,Edgar

Report Date:

30 Dec 1955

Media Count:

12 Page(s)

Report Number(s):

P-786

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604976

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EIGENVALUES AND FUNCTIONAL EQUATIONS,

Personal Author(s):

Bellman, Richard

Report Date:

28 Dec 1955

Media Count:

10 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper was to illustrate how the techniques of the theory of dynamic programming may be used to convert a number of eigenvalue problems, where one is interested only in maximum or minimum values, into problems involving recurrence relations. Treated Jacobi matrices, some special types of quadratic forms possessing certain features of regularity, and finally Sturm-Liouville problems. The method discussed is not only useful for computational purposes, but provides a method for studying the analytic dependence of the maximum and minimum eigenvalues upon the analytic structure of the matrix.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604973

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PREDICTION OF POLITICAL ACTION BY MEANS OF PROPAGANDA ANALYSIS,

Personal Author(s):

George, Alexander L

Report Date:

22 Dec 1955

Media Count:

30 Page(s)

Report Number(s):

P-779

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problems of the wartime content analysts in predicting the initiatives of an opponent through analysis of his propaganda is described. It is selected for discussion here for two reasons: first, the methodological approach to this problem went through an interesting development in the course of the war; second, in addition to the obvious practical interest of this problem at the time, it has a certain theoretical interest as well, since it bears upon the general question of the relationship of communication and action in the relations between nations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604931

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON THE THEORY OF DYNAMIC PROGRAMMING, V. MAXIMIZATION OVER DISCRETE SETS,

Personal Author(s):

Bellman, Richard

Report Date:

12 Dec 1955

Media Count:

10 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theory of dynamic programming is applied to a class of problems involving maximization over discrete sets. The solution is made to depend on the solution of a class of functional equations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604649

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A 'TRANSITION MODEL' LABORATORY FOR RESEARCH ON CULTURAL CHANGE,

Personal Author(s):

Kennedy, John L

Report Date:

08 Dec 1955

Media Count:

14 Page(s)

Report Number(s):

P-653 REV.

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It may be possible to close the gap between field experiments on cultural change and traditional psychological laboratory investigations with laboratory studies of transition-model organizations analogous to the wind-tunnel studies of aircraft designers. Four such studies were conducted with an Air Defense Direction Center, using techniques that speeded up cultural change. Three periods of organizational growth--and several methods of cultural change--were observed in these model organizations. The first, or 'basal' period, characterized by the use of individual, habitual ways of doing things, was followed by a 'consolidation' period characterized by the use of procedures borrowed from other groups and situations, by individual efforts and 'inventions,' and by blaming difficulties on faulty equipment. The last, or 'organization,' period was characterized by 'organizational inventions'--programs for coordinating individual behavior that lead, when successful, to new or modified institutions. Both the simulation techniques developed during transition-model laboratory studies and the indexes and other standards of measurement derived from them can be transferred directly for use in field studies.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604974

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND THE NUMERICAL SOLUTION OF VARIATIONAL PROBLEMS,

Personal Author(s):

Bellman, Richard

Report Date:

08 Dec 1955

Media Count:

24 Page(s)

Report Number(s):

P-780

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A simple, readily applicable technique, requiring no mathematical background beyond elementary calculus, which can be used to compute the solution of a variety of problems in a routine fashion, with no regard to linear or nonlinear, stochastic or deterministic features of the underlying processes is present. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604970

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON THE THEORY OF DYNAMIC PROGRAMMING---VI. THE WAREHOUSING MODEL,

Personal Author(s):

Bellman,Richard

Report Date:

29 Nov 1955

Media Count:

8 Page(s)

Report Number(s):

P-773

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to show how the functional equation technique of the theory of dynamic programming yields a very simple computational algorithm for the solution of mathematical models arising in stock level studies. A numerical solution of these problems relying upon linear programming techniques had previously been given by Charnes and Cooper. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604969

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIMIT THEOREMS FOR NONCOMMUTATIVE PROCESSES--II: ON A GENERALIZATION OF THE STIELTJES INTEGRAL,

Personal Author(s):

Bellman,Richard

Report Date:

28 Nov 1955

Media Count:

12 Page(s)

Report Number(s):

P-772

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents two generalizations of the RiemannStieltjes integral arising from the study of positive definite matrices. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604968

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON THE THEORY OF DYNAMIC PROGRAMMING---VII. TRANSPORTATION MODELS,

Personal Author(s):

Bellman,Richard

Report Date:

28 Nov 1955

Media Count:

12 Page(s)

Report Number(s):

P-771

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to illustrate some applications of the functional equation technique of the theory of dynamic programming to a general class of problems arising in the study of networks, particularly those arising in transportation theory. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604966

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CLIMATOLOGY: COMPLEX, DYNAMIC, AND SYNOPTIC,

Personal Author(s):

Court,Arnold

Report Date:

22 Nov 1955

Media Count:

30 Page(s)

Report Number(s):

P-769

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Origins, definitions, applications, and uses of three aspects of modern climatology (dynamic synoptic, and complex) are offered in this note. A survey of existing methods of climatic analysis was undertaken in an effort to sharpen the definitions in a Glossary of Meteorology being prepared by the American Meterological Society.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604967

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON CONVERSES OF SCHWARTZ'S INEQUALITY,

Personal Author(s):

Bellman, Richard

Report Date:

22 Nov 1955

Media Count:

12 Page(s)

Report Number(s):

P-770

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to present a general method for treating questions involving the converse of the Schwarz and Holder inequalities. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0087965

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BEST EXPLORATION FOR MAXIMUM IS FIBONACCIAN

Personal Author(s):

JOHNSON, SELMER M

Report Date:

18 Nov 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604975

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ABSTRACT SETTING FOR THE NOTION OF DYNAMIC PROGRAMMING,

Personal Author(s):

Ellis,David

Report Date:

15 Nov 1955

Media Count:

14 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) After a brief resume of the needed concepts, the notion of a dynamic programming process is axiomatized and an appropriate version of the 'Principle of Optimality' is shown as a consequence.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604965

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRANSIENT MARKOV CHAINS WITH STATIONARY MEASURES,

Personal Author(s):

Harris,T E

Report Date:

11 Nov 1955

Media Count:

12 Page(s)

Report Number(s):

P-767

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this note conditions are given for the existence of solutions of the 'equations of stationarity' where the markov chain is transient. A necessary condition and a sufficient condition for the existence of a solution was obtained and the main results are given in two theorems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604964

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON CONTROL PROCESSES. I. ON THE MINIMUM OF MAXIMUM DEVIATION,

Personal Author(s):

Bellman,Richard

Report Date:

10 Nov 1955

Media Count:

10 Page(s)

Report Number(s):

P-765

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The functional equation technique of the theory of dynamic programming is applied to the problem of determining the minimum of the maximum deviation of a system from a preassigned state. The problem is that of choosing y , a vector function of t , so as to minimize the maximum deviation of $x(t)$ from a given vector $z(t)$, over a fixed interval $0 \leq t \leq T$.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604963

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL EQUATIONS IN THE THEORY OF DYNAMIC PROGRAMMING. VI. A DIRECT CONVERGENCE PROOF,

Personal Author(s):

Bellman, Richard

Report Date:

08 Nov 1955

Media Count:

20 Page(s)

Report Number(s):

P-764

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604721

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PACT LOOP EXPANSION,

Personal Author(s):

Hempstead,Gus

Schwartz,Jules I

Report Date:

31 Oct 1955

Media Count:

16 Page(s)

Report Number(s):

P-692

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion of the method used to write loops in machine language for any series of PACT I compiler instructions is presented. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604958

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) An Introductory Note: For the Proceedings of the Gainesville, Florida, Symposium on Monte Carlo Methods,

Personal Author(s):

Marshall,A W

Report Date:

24 Oct 1955

Media Count:

18 Page(s)

Report Number(s):

P-756

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The report is concerned with the Monte Carlo method as a tool of numerical analysis. The progress of the method from the late forties to the present is described. Early applications and the initial development of the sampling technique as well as the current state of the Monte Carlo method are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604957

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON MATRIX THEORY-X: A PROBLEM IN CONTROL,

Personal Author(s):

Bellman, Richard

Report Date:

19 Oct 1955

Media Count:

6 Page(s)

Report Number(s):

P-755

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the theory of control processes, it is important to be able to calculate the integral of $(x, Bx) dt$ between 0 and infinity without having to solve explicitly the differential equation $dx/dt = Ax$, $x(0) = c$. A

method for doing this is presented in this paper, generalizing one due to Anke for nth order linear differential equation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604700

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYSTEMS BEHAVIOR. I. THE LEARNING PROCESS,

Personal Author(s):

Alexander, Lawrence T

Report Date:

17 Oct 1955

Media Count:

5 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Behavioral changes that occurred during the air defense experiments are discussed. Evidence that learning took place in the experiments is based on the occurrence of behavioral changes which enabled the air defense crews to deal with the task environment more adequately.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604696

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DESCRIPTION OF THE AIR-DEFENSE EXPERIMENTS. III. DATA COLLECTION AND PROCESSING,

Personal Author(s):

Chapman,Robert L

Report Date:

17 Oct 1955

Media Count:

6 Page(s)

Report Number(s):

P-658

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604697

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DESCRIPTION OF THE AIR-DEFENSE EXPERIMENTS. II. THE TASK ENVIRONMENT,

Personal Author(s):

Newell,Allan

Report Date:

17 Oct 1955

Media Count:

5 Page(s)

Report Number(s):

P-659

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604698

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYSTEMS BEHAVIOR. II. THE DEVELOPMENTAL PROCESS,

Personal Author(s):

Weiner, Milton G

Report Date:

17 Oct 1955

Media Count:

6 Page(s)

Report Number(s):

P-660

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The developmental process of an organization is examined. Three phases are distinguished; the basal phase, the consolidation phase, and the organization phase.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604699

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DESCRIPTION OF THE AIR-DEFENSE EXPERIMENTS. I. THE PHYSICAL AND CULTURAL ENVIRONMENTS,

Personal Author(s):

Biel, William C

Report Date:

17 Oct 1955

Media Count:

7 Page(s)

Report Number(s):

P-661

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604695

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SYSTEMS RESEARCH LABORATORY AND ITS PROGRAM,

Personal Author(s):

Kennedy, John L

Report Date:

17 Oct 1955

Media Count:

4 Page(s)

Report Number(s):

P-657

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A systems research laboratory, whose primary interest has been the behavior of man-machine systems, was established. The goal of the laboratory, predicting the performance of man-machine systems, is discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422832

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NON-RECALL OF MATERIAL PRESENTED DURING SLEEP,

Personal Author(s):

Emmons, William H

Simon, Charles W

Report Date:

12 Oct 1955

Media Count:

15 Page(s)

Report Number(s):

P619

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A list of ten one-syllable nouns was repeated as many times as possible to nine Ss during an eight-hour sleep period. A continuous EEG recording during the presentation of the training material was used to determine the sleep level at that time. The stimulus material was turned off as soon as cyclical activity within the alpha range was observed. The experimental Ss did not do significantly better than the control group in selecting the words on the training list of 50 words. Nor did they choose the training words any more frequently than they chose an equivalent list of untrained words. There was some indication that words presented during a period of deep drowsiness can be retained, but this was significant only when the S was also able to give an immediate response to the material being presented. The effects of sleep level and the importance of continuous EEG monitoring while presenting the training material are discussed in their relation to recall. It is concluded that material presented a number of times during sleep (using an EEG criterion) cannot be subsequently recalled. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604954

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE POWER SPECTRUM OF THE TURBULENTSCATTERED FIELD,

Personal Author(s):

Hoffman,William C

Report Date:

11 Oct 1955

Media Count:

16 Page(s)

Report Number(s):

P-749

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theoretical problem of wave motion in a medium which is isotropic but turbulent and whose index of refraction is a random function of position is discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422833

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RESPONSES TO MATERIAL PRESENTED DURING VARIOUS LEVELS OF SLEEP.

Personal Author(s):

Simon, Charles W

Emmons, William H

Report Date:

10 Oct 1955

Media Count:

27 Page(s)

Report Number(s):

P-618

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Ninety-six questions and answers were played to the Ss once each at five minute intervals throughout the sleep period. Both the percentage of immediate responses and the percentage of items recalled correctly decreased as the percentage of alpha frequencies decreased. Shortly after occipital alpha frequencies disappeared from the EEG, immediate responses and item recall also stopped. This was more evident when tested by recognition than by unaided recall. Approximately 5% of the items presented during non-alpha levels were responded to immediately, recalled later, or both. A majority of these items occurred when particular EEG patterns associated with arousal occurred; alternative explanations other than sleep-learning are offered for the few remaining items. Learning during real sleep is concluded to be impractical and probably impossible. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604722

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SEMI-AUTOMATIC ALLOCATION OF DATA STORAGE FOR PACT I,

Personal Author(s):

Derr, J I

Luke, R C

Report Date:

10 Oct 1955

Media Count:

18 Page(s)

Report Number(s):

P-693

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The function of PACT is to compile a machine-language code from a given PACT pseudo-language code. In this sense PACT shortens the gap between the computational model and the final machine code by performing much of the intervening work. The paper is primarily concerned with the system which was designed to allocate machine storage locations for the operands which are involved in PACT pseudo-operations. The system was made to allocate storage locations automatically up to the total capacity of the high-speed memory and to allow the user some convenient means for constraining this allocation when necessary. No provision was made for automatic secondary storage allocation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604955

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON REDUCING TENSION,

Personal Author(s):

Kecskemeti,Paul

Report Date:

10 Oct 1955

Media Count:

14 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The thesis that one can neither maintain nor reduce chronic international tension by design is pursued.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0087819

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RECENT TRENDS IN SOVIET TRADE

Descriptive Note:

Research memo.,

Personal Author(s):

HOEFFDING, OLEG

Report Date:

10 Oct 1955

Media Count:

28 Page(s)

Report Number(s):

RM-1567

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604953

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A FRUITFUL APPLICATION OF STATIC MARGINAL ANALYSIS,

Personal Author(s):

Karr,H W

Geisler,M A

Report Date:

10 Oct 1955

Media Count:

34 Page(s)

Report Number(s):

P-748

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper describes the application of the technique of simple 'marginal analysis' to an Air Force problem and suggests that a similar application may be useful in many industrial situations. Examples of such industrial problems are also presented. The class of problems discussed can be described as those in which the demand or need for each of several alternative commodities during a specified period of time can be expressed in terms of a probability distribution. Given that the needs can only be met from a package of such commodities of specified total cost, the problem is to select the composition of commodities to be put into the package so that the number of unsatisfied demands or shortages will be minimized. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422836

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NEW APPROACH TO PENETRATION MECHANICS,

Personal Author(s):

Huth,J H

Thompson,J S

Van Valkenburg,M E

Report Date:

06 Oct 1955

Media Count:

24 Page(s)

Report Number(s):

P746

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An experimental impact research program for spacecraft utilizing present-day equipment was conducted by accelerating particles to high velocities - of the order of 10,000 ft/sec. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604537

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE SPECTRUM OF SINGULAR BOUNDARYVALUE PROBLEMS FOR ELLIPTIC DIFFERENTIAL EQUATIONS,

Personal Author(s):

Birman,M Sh

Report Date:

05 Oct 1955

Media Count:

8 Page(s)

Report Number(s):

TT-64 71242

Monitor Series:

64 71242

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604929

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONCLUSIONS AFTER USING THE PACT-1 ADVANCED CODING TECHNIQUE,

Personal Author(s):

Greenwald,I D

Martin,H G

Report Date:

04 Oct 1955

Media Count:

12 Page(s)

Report Number(s):

P-719

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) From experience with the PACT-1 Advanced Coding Technique as used on the IBM Type 701 Data Processing Machine a comparison is made between this coding system and 'machine language' coding with reference to coding time, number and types of errors, 'debugging' time and experience needed by the coder. In addition there are suggestions as to improvements that can be made on future systems and comments substantiating decisions made while writing the specifications for the system. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604951

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DEGREES OF COMPUTABILITY,

Personal Author(s):

Shapiro, Norman

Report Date:

03 Oct 1955

Media Count:

40 Page(s)

Report Number(s):

P-744

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An investigation is made of the degrees of computability (in the theoretical sense) of certain decision problems. The Kleene hierarchy is extended to partial relations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0093458

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/093458.pdf

Size: 3 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD093458>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Fundamentals of a Method for Evaluating Rail Net Capacities

Personal Author(s):

HARRIS, T E

ROSS, F S

Report Date:

Oct 1955

Media Count:

63 Page(s)

Report Number(s):

RM-1573

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution unlimited

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604715

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DESCRIPTION OF A COOPERATIVE VENTURE IN THE PRODUCTION OF AN AUTOMATIC CODING SYSTEM,

Personal Author(s):

Melahn, Wesley S

Report Date:

27 Sep 1955

Media Count:

11 Page(s)

Report Number(s):

P-686

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper surveys and evaluates some of the ideas that were suggested during a search for an improved way of programming problems for machine solution. It attempts to justify the choices that were made in the design of PACT I, a program that produces efficient machine language code for the 701 computer from a concise description of the steps in a calculation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604950

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON DIFFERENTIAL GAMES WITH SURVIVAL PAYOFFS,

Personal Author(s):

Scarf,Herbert

Report Date:

22 Sep 1955

Media Count:

20 Page(s)

Report Number(s):

P-742

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A class of survival games is considered in an arbitrary n-dimensional region R, and with an arbitrary payoff function $f(x)$ on the boundary. If the steps are uniformly decreased in size, the equations

specifying the changes in the state of the game tend to approximate the equations of a differential game. A particular class of games is treated in which neither player can force the state of the game to proceed in any direction. It is shown that under certain conditions, the upper and lower values of the approximating games actually converge to the same function. The limiting value is given by the solution of $L(V) = 0$, with boundary value $f(x)$, where $L(V)$ is a certain second-order differential operator associated with the game. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604956

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604956.pdf

Size: 97 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604956>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COGWHEEL: A FILM STORY OF SYSTEMS RESEARCH LABORATORY'S ACTIVITIES

Personal Author(s):

Chapman, Robert L

Weiner, Milton G

Report Date:

21 Sep 1955

Media Count:

3 Page(s)

Report Number(s):

RAND/P-753

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) 'Cogwheel' is a 30-minute sound film that shows a 40-man Air Force crew operating an air-defense direction center in the Systems Research Laboratory at The RAND Corporation. It traces the development of the Cogwheel crew as an organization, illustrates the complexities of direction-center operations, brings out some of the problems of studying systems in a laboratory, and demonstrates the realism in human behavior and environment building that can be attained in laboratory studies of this kind.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604949

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604949.pdf

Size: 743 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604949>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE BACKGROUND AND IMPLICATIONS OF THE SYSTEMS RESEARCH LABORATORY STUDIES

Personal Author(s):

Chapman, Robert L

Kennedy, John L

Report Date:

21 Sep 1955

Media Count:

19 Page(s)

Report Number(s):

RAND/P-740

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The effective operation of complex man-machine systems was researched. In its laboratory studies of complete organizations the Systems Research Laboratory used a full-scale model of an air-defense direction center. One major result of this study was the development of techniques for using group learning in greatly improving system performance. In addition to a theoretical approach that can be used by other scientists, the results of this study have many implications for system design, especially in personnel selection and training and in human engineering.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604718

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CRITERIA FOR THE SELECTION OF WATER-RESOURCE PROJECTS,

Personal Author(s):

McKean,Roland N

Report Date:

16 Sep 1955

Media Count:

16 Page(s)

Report Number(s):

P-689-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem of selecting water-resource developments such as navigation, flood-control, and soil-conservation measures is discussed. The use of analysis to increase efficiency in water-resource development is suggested.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604948

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RECENT TRENDS IN SOVIET TRADE,

Personal Author(s):

Hoeffding,Oleg

Report Date:

15 Sep 1955

Media Count:

28 Page(s)

Report Number(s):

P-739

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Soviet record in East-West trade since 1953 and the salient developments in bloc trade are discussed. A detailed scrutiny of Soviet performance in trade with the free world is analyzed to evaluate Soviet claims that the USSR wants more trade as a natural adjunct of peaceful coexistence and relaxed tension. The question of whether the USSR has lately shown evidence of genuinely greater trade-mindedness than it displayed under Stalin is considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0101072

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE PROBLEM OF DETERMINING THE POSITION ON A TARGET WITH CONSTANT SIGNAL IN THE PRESENCE OF CIRCUIT NOISE OR CHAFF

Personal Author(s):

SIEGERT, A J F

Report Date:

13 Sep 1955

Media Count:

15 Page(s)

Report Number(s):

RM-1643

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604536

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET SCHOOLS IN SCIENCE (TRANSLATION AND COMMENTS BY F. J. KRIEGER AND V. S. JITTLOV),

Personal Author(s):

Knunyants,I

Zubkov,L

Report Date:

12 Sep 1955

Media Count:
18 Page(s)
Report Number(s):
T-50
TT-64 71241
Monitor Series:
64 71241
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0087962
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) A SEARCH PROBLEM DUE TO BELLMAN
Personal Author(s):
GROSS, O
Report Date:
12 Sep 1955
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604947

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SYSTEMATIC APPROACH TO A CLASS OF PROBLEMS IN THE THEORY OF NOISE AND OTHER
RANDOM PHENOMENA,

Personal Author(s):

Darling,D A

Siegert,A J F

Report Date:

10 Sep 1955

Media Count:

22 Page(s)

Report Number(s):

P-738

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem of finding the probability distribution of a functional, consisting of a (multi-dimensional) Markoff process and a given function, appears in many forms in the theory of noise and other random phenomena. It is shown that a certain function from which this probability distribution can be obtained is the unique solution of two integral equations. A perturbation formalism which relates the solutions of the integral equations belonging to two different functions is developed. If the transition probability density is the principal solution of two partial differential equations of the Fokker-Planck-Kolmogoroff type, the principal solution of two similar differential equations is the solution of the integral equations. As an example the probability distribution of the sample probability density for a stationary Markoff process is calculated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0087813

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ABSORPTION COEFFICIENTS OF AIR FROM 6000 K TO 18,000 K

Descriptive Note:

Research memo.,

Personal Author(s):

MEYEROTT,R E

Report Date:

09 Sep 1955

Media Count:

11 Page(s)

Report Number(s):

RM-1554

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604946

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RECENT TRENDS IN THE SOVIET ECONOMY,

Personal Author(s):

Kershaw,Joseph A

Report Date:

08 Sep 1955

Media Count:

26 Page(s)

Report Number(s):

P-737

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Some recent trends in the Soviet economy from the viewpoint of their influence on Soviet rates of growth are examined. Growth rates in effect before Stalin's death are analyzed in order to evaluate the influence of the post-Stalin changes. Future developments in the economy are predicted with particular emphasis on the probabilities that rates of growth in the future will or will not vary significantly from those that have characterized the past.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604945

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BALANCE SCALE SORTING,

Personal Author(s):

Cairns,S S

Report Date:

07 Sep 1955

Media Count:

40 Page(s)

Report Number(s):

P-736

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Given (1) a set W of n objects, indistinguishable save that the members of a subset H of h objects are slightly heavier than the rest (2) a balance scale, one seeks weighing programs minimizing either (Problem $M(n,h)$) the maximum number of weighings which may be required to cull out H or (Problem $E(n,h)$) the expected number of such weighings. Problem $M(n,1)$ is a familiar puzzle. Problem $E(n,1)$ was solved under various hypotheses. Problem $M(n,2)$ was partially solved. Some aspects of it require further investigation. The paper could be used as a basis for more research on $M(n,h)$ and $E(n,h)$ in

general. Some of the techniques involve manipulations of series which may be applicable to other combinatorial problems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604944

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE PARTITION OF THE VERTICES OF AN N-CUBE BY AN (N-1)-PLANE,

Personal Author(s):

Cairns,S S

Report Date:

07 Sep 1955

Media Count:

20 Page(s)

Report Number(s):

P-735

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604943

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON FUTURE MILITARY AIR TRANSPORT REQUIREMENTS,

Personal Author(s):

Eastman,Samuel E

Report Date:

07 Sep 1955

Media Count:

8 Page(s)

Report Number(s):

P-734

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The movement of passengers and cargo for the military establishment overseas is discussed. Costs of the operation as well as the availability of appropriate peacetime fleets in the event of war are examined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604942

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCIENTIFIC USE OF AN ARTIFICIAL SATELLITE,

Personal Author(s):

Kallmann,H K

Kellogg,W W

Rapp,R R

Greenfield,S M

Report Date:

06 Sep 1955

Media Count:

24 Page(s)

Report Number(s):

P-733

Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604941
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) LINE WIDTH PROBLEMS IN HOT DENSE ATMOSPHERES,
Personal Author(s):
Meyerott,Roland
Report Date:
06 Sep 1955
Media Count:
14 Page(s)
Report Number(s):
P-732
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:
(U) Line width problems as they arise under conditions of temperature and density such as are found in stellar interiors are discussed. Possibilities of experimental verification are briefly considered. (Author)
Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604940

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NEW TECHNIQUE FOR EIGENVALUE PROBLEMS, I,

Personal Author(s):

Osborn,Howard

Report Date:

02 Sep 1955

Media Count:

22 Page(s)

Report Number(s):

P-731

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A functional equation is developed for the variational problem associated with the lowest eigenvalue of the given differential equation; the development is in part modelled after that of Bellman's formalism for non-isoperimetric variational problems in the calculus of variations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604939

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYSTEMATIC APPROACH TO A CLASS OF PROBLEMS IN THE THEORY OF NOISE AND OTHER RANDOM PHENOMENA. II EXAMPLES,

Personal Author(s):

SIEGERT,A J

Report Date:

01 Sep 1955

Media Count:

24 Page(s)
Report Number(s):
P-730
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604938
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) INDUSTRIAL TRAINING IN THE SOVIET UNION,
Personal Author(s):
Galenson, Walter
Report Date:
31 Aug 1955
Media Count:
46 Page(s)
Report Number(s):
P-729
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The State Labor Reserves schools reached their peak in 1948, when they graduated one million workers. During the same year, 2.3 million new workers were trained on the job. The output of the Labor Reserves schools fell gradually to a low of 320,000 in 1953, but rose in 1954 owing to their use in training agricultural machinery operators on a large scale. The present Soviet policy appears to favor the continuance of these schools and the improvement in the quality of the training they offer through increasing the length of instruction. However, until the growth of the industrial labor force is slowed considerably, the majority of new workers will probably continue to be trained directly on the job. A great effort has been made since the war to improve the quality of the labor force through an elaborate system of courses, schools, and lectures. A common feature of these program is that they are conducted

after working hours to prevent any interference with production. While the Soviet data are difficult to evaluate, one gains the impression that since 1945 a substantial majority of Russian industrial workers have been given technical training in the form of short lecture courses. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604937

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EXISTENCE OF STATIONARY MEASURES FOR CERTAIN MARKOV PROCESSES,

Personal Author(s):

Harris,T E

Report Date:

31 Aug 1955

Media Count:

30 Page(s)

Report Number(s):

P-728

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The idea of a stationary distribution for a Markov process can be extended to include 'distribution' or measures which are infinite. It is shown that a certain type of recurrence condition implies the existence of a possible infinite stationary measure. Applications are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604936

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RECENT TRENDS IN SOVIET MILITARY POLICY,

Personal Author(s):

Garthoff,R L

Report Date:

30 Aug 1955

Media Count:

20 Page(s)

Report Number(s):

P-726

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The announcement of the Soviet Union regarding the demobilization of its armed forces is discussed. The real objective of the reduction of ground forces is seen as a means of increasing over-all Soviet strength.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604935

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON RANDOMIZED BRANCH SAMPLING,

Personal Author(s):

Marshall,A W

Report Date:

26 Aug 1955

Media Count:

8 Page(s)

Report Number(s):

P-725

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper the author discusses the randomized branch sampling plans, indicates how and why they work, shows how the statistical idea behind these sampling plans is the same as the idea of importance sampling developed in Monte Carlo calculations, and suggests some refinements of Professor Jessen's method of estimating the fruit count on a tree by randomized branch sampling based upon their identity with importance sampling.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604934

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CARGO DENSITY VARIATIONS: A CHALLENGE TO AIR TRANSPORT,

Personal Author(s):

BICKNER,R E

Report Date:

24 Aug 1955

Media Count:

50 Page(s)

Report Number(s):

P-724

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that cargo densities, and particularly variations in cargo density from flight to flight, are important in many phases of air transportation. These variations affect the matching of airlift capabilities with airlift requirements; the designing of transport aircraft; the selecting of aircraft for a fleet; the routing of aircraft; and the allocating of airlift. It is emphasized that cargo densities vary considerably from flight to flight and from route to route. When one thinks and plans in terms of some average density, as if cargo densities were always the same, one runs the risk of making wrong decisions and promoting inefficiency. In many instances these mistakes can be avoided and examples are given of how better estimates and decisions might sometimes be reached. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604535

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON WAVES OF LOADING AND UNLOADING, ARISING FROM THE MOTION OF AN ELASTIC OR PLASTIC FLEXIBLE FIBRE,

Personal Author(s):

Cristescu,N

Report Date:

23 Aug 1955

Media Count:

22 Page(s)

Report Number(s):

T-49

TT-64 71240

Monitor Series:

64 71240

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The work consists of three sections. In the first section, with the aid of the method of characteristics, consideration is given to transverse and longitudinal waves propagating in a flexible (elastic or plastic)

fibre. The tension is presupposed as a given function of strain. In the second section, the motion of a semi-infinite fibre is considered. The force of the reaction at the end of the fibre is such, that the material of that part exceeds the limit of elasticity. Waves of loading and unloading are investigated with the hypothesis of ideal plasticity. The third section is devoted to the same problem in the case of a linear approximation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604932

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FAMILIES OF TRANSFORMATIONS IN THE FUNCTION SPACES $H(P)$,

Personal Author(s):

Swerling,P

Report Date:

19 Aug 1955

Media Count:

38 Page(s)

Report Number(s):

P-722

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604720

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FILE REFERENCE,

Personal Author(s):

Postley, J A

Report Date:

18 Aug 1955

Media Count:

22 Page(s)

Report Number(s):

P-691

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Suggestions which will be useful in the problem area of reference to large files of information are presented. The conclusions which are drawn or may be implied are presented below. While the problem of indexing is essentially the same in any file reference problem and equipment, it can always be solved by keeping the (exhaustive) index - not the file - up to date. In some cases it is possible to appreciably reduce the size of the index which may be required. Undue emphasis on the factor of pipeline time may be removed in favor of increased emphasis on that of traffic rate. This may be done with the same equipment in three different ways, namely: (1) by approximating the optimum balance of emphasis within a single problem; (2) by emphasizing one of these factors in one problem and another in another problem, within the same framework of mechanization; and (3) by emphasizing one factor, e.g., traffic rate, throughout the problem and handling requests requiring an emphasis of pipeline time reduction as special cases, emphasizing this factor. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604707

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /U2/604707.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604707>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME THOUGHTS ON THE SOCIAL STRUCTURE AFTER A BOMBING DISASTER

Personal Author(s):

Hirshleifer, Jack

Report Date:

18 Aug 1955

Media Count:

31 Page(s)

Report Number(s):

P-674

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The social consequences of a major bombing disaster are explored by an examination of the effects of bombing upon the organization of society, upon the distribution of political and economic power, and upon institutions relevant to the effective functioning of society.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422837

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPRECIATION OF SYSTEMS ANALYSIS,

Personal Author(s):

Hitch,Charles

Report Date:

18 Aug 1955

Media Count:

25 Page(s)

Report Number(s):

P699

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Does analysis help more in the narrow context problems, where it has commonly been applied by scientists, or in the broad context problems, which are the special province of systems analysts. On the basis of results, certainly one would have to say that the case for analysis in broad context problems is comparatively unproved. However, it is suggested that one reason why, when we are dealing with broad problems with broad systems analyses, explicit analysis using explicit models can be especially important. But in these cases we are dealing with a field so broad that no one can be called expert. A typical systems analysis depends critically on numerous technological factors in several fields of technology; on military operations and logistics factors on both our side and the enemy's; on broad economic, political and strategic factors; and on quite intricate relations among all these. No one is an expert in more than one or two of the sub-fields; no one is an expert in the field as a whole and the interrelations. So no one's unsupported intuitions in such a field can be trusted. Systems analyses should be looked upon not as the antithesis of judgment but as a framework which permits the judgment of experts in numerous sub-fields to be combined--to yield results which transcend any individual judgment. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604644

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RADIATION PATTERNS OF UNSYMMETRICALLY FED PROLATE SPHEROIDAL ANTENNAS,

Personal Author(s):

Myers, H A

Report Date:

18 Aug 1955

Media Count:

19 Page(s)

Report Number(s):

P-645

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Maxwell's equations are solved in prolate spheroidal (PS) coordinates subject to the boundary conditions. The PS functions are expressed in the form of power series and Laurent series. Radiation patterns were obtained for PS transmitting antennas of three different lengths up to about one wavelength long, for length/thickness ratios of about 5/1, 10/1, 22/1, and 316/1, and for nine unsymmetrical gap locations as well as for the symmetrically fed cases. It was found that the two most important factors affecting the radiation pattern of a fairly thin antenna were the location of the gap and the electrical length. For antennas less than a half wavelength long the pattern was the usual symmetrical figure eight and was essentially independent of the location of the gap (except for magnitude changes due to the different gap impedances). For antennas two-thirds to three-quarters of a wavelength long the figure eight patterns could be 'bent' in the direction of the longer element, and for antennas one wavelength long or longer minor lobes began to appear. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604930

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DEMOGRAPHIC INTERACTION ANALYSIS AND ITS BEARING ON SMALL GROUP STUDIES,

Personal Author(s):

Ikle, F C

Report Date:

17 Aug 1955

Media Count:

14 Page(s)

Report Number(s):

P-720

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The interactions of populations in spatially separated areas is analyzed. Statistical and correlation analysis of urban areas and population functions are used to determine interaction frequencies.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604928

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PROBLEM OF CONTINUOUS PROGRAMS,

Personal Author(s):

Osborne,Howard

Report Date:

12 Aug 1955

Media Count:

20 Page(s)

Report Number(s):

P-718

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A convergence theorem is presented under specific assumptions on the form of the difference equations which define the process, rather than on their solutions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604927

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON DIFFERENTIAL GAMES WITH INTEGRAL PAYOFF,

Personal Author(s):

BERKOVITZ,L D

Fleming,W H

Report Date:

10 Aug 1955

Media Count:

34 Page(s)

Report Number(s):

P-717

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Methods of the calculus of variations were employed to obtain necessary conditions that differential games of a certain type have a saddle-point. By strengthening the necessary conditions, sufficient conditions for the existence of a saddle-point and a method of constructing the saddlepoint were derived. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604717

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTING EXPERIENCE WITH LINEAR PROGRAMMING AND ITS VARIANTS,

Personal Author(s):

Orchard-Hays,William

Report Date:

08 Aug 1955

Media Count:

14 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The application of linear programming to complex problems gives rise to the handling of large matrix problems. The simplex method proved to be the most expedient of any tried but, since this is essentially Gaussian elimination, numerical techniques for handling it have definite limitations, both with regard to running time and memory size. RAND's simplex codes for the IBM 701 were designed, through revisions to the method and special compiling routines, to maintain great precision and facilitate checking, to be adaptable to many variations, and to be as automatic in operation as possible. Several quite large models of considerable variety are discussed along with the prospects for future improvements, both in theory and in coding techniques. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604926

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A GENERALIZATION OF SOME INTEGRAL IDENTITIES DUE TO INGHAM AND SIEGEL,

Personal Author(s):

Bellman,Richard

Report Date:

08 Aug 1955

Media Count:

16 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper evaluates generalizations of multi-dimensional integrals due to Ingham and Siegel, and gives a number of applications of these results. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604716

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETERMINATION OF THE MAXIMAL STEADY STATE FLOW OF TRAFFIC THROUGH A RAILROAD NETWORK,

Personal Author(s):

BOLDYREFF,Alexander W

Report Date:

05 Aug 1955

Media Count:

41 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A simple and rapid method of estimating the maximal steady state flow of traffic through a railway network is described and illustrated by examples. The method, as presently described, is entirely empirical in character and no generality is claimed. Essentially, it is an illustration of the application of the techniques of gaming to certain classes of mathematical problems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604924

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A CLASS OF VARIATIONAL PROBLEMS,

Personal Author(s):

Bellman, Richard

Report Date:

03 Aug 1955

Media Count:

14 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem of determining the minimum of a functional is treated using the functional equation technique of the theory of dynamic programming. The problem is reduced to the solution of a system of ordinary differential equations satisfying one-point boundary conditions. The discrete case, corresponding to the minimization of a class of quadratic forms, is also treated by the same general method. A particular problem of this type arises in the treatment of the optimal inventory problem by Holt, Simon, and Modigliani.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604923

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON THE DYNAMICS OF A DISORDERED LINEAR CHAIN,

Personal Author(s):

Bellman,Richard

Report Date:

03 Aug 1955

Media Count:

6 Page(s)

Report Number(s):

P-713

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) By a disordered linear chain, we mean a chain of onedimensional harmonic linear oscillators, each coupled to its nearest neighbors by harmonic forces, with the mass of each oscillator and the coupling parameters taken to be random variables with known distributions. The problem of calculating the distribution function of the frequencies of the normal modes of vibration of the chain in the limit as the chain becomes infinitely long was resolved by F. J. Dyson. This paper presents a simple algebraic proof of the essential limit relation in Dyson's paper. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604922

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A THEOREM ON DESCRIPTION ADEQUACY,

Personal Author(s):

Ellis,David

Report Date:

02 Aug 1955

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Propositions asserting the adequacy of certain classes of nets in a topological space to describe the topology of the space are discussed and a new such class, based on the notion of selection operator, is adduced. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604726

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE TOPOLOGY OF FINITARY APPROXIMATION,

Personal Author(s):

Ellis,David

Report Date:

02 Aug 1955

Media Count:

12 Page(s)

Report Number(s):

P-698

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper contemplates a certain reasonably strong (d.h. at least as many accumulation points as pointwise convergence) topology in the space of functions mapping an arbitrary set into an arbitrary metric space. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604560

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE OPTIMAL INVENTORY EQUATION,

Personal Author(s):

Bellman,R

Glicksberg,I

Gross,O

Report Date:

28 Jul 1955

Media Count:

41 Page(s)

Report Number(s):

P-580

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A number of functional equations which arise in the optimal inventory problem, the general problem of ordering in the face of an uncertain future demand, are discussed. Complete solutions are obtained for the case of an arbitrary number of items and arbitrary distribution of demand when the cost functions are taken proportional to the quantity ordered. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604758

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE INFLUENCE OF WEAK ATMOSPHERIC INHOMOGENEITIES UPON THE PROPAGATION OF SOUND AND LIGHT,

Personal Author(s):

Obukhov,A

Report Date:

28 Jul 1955

Media Count:

22 Page(s)

Report Number(s):

T-47

TT-64 71252

Monitor Series:

64 71252

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem of wave propagation in a medium with fluctuating refractive index is considered, this problem being of interest from the standpoint of the theory of twinkling of stars and atmospheric acoustics. The problem is reduced to linearized equations satisfied by the phase and logarithmic amplitude of the propagating wave. Limiting cases are investigated and particular examples are considered to indicate the limits of validity of the geometric optics treatment and the nature of the corrections required to take account of diffraction effects. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604920

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604920.pdf

Size: 431 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604920>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME OBSERVATIONS ON FACTOR ANALYSIS

Personal Author(s):

Harman, Harry H

Report Date:

27 Jul 1955

Media Count:

9 Page(s)

Report Number(s):

P-710

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) This paper is concerned with the origin and growth of factor analysis. An appraisal is made of its present status. The paper, therefore, is non-mathematical, expository in character.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604538

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE CAUCHY PROBLEM FOR NONLINEAR EQUATIONS IN A CLASS OF DISCONTINUOUS FUNCTIONS,

Personal Author(s):

Oleinik,O A
Report Date:
27 Jul 1955
Media Count:
11 Page(s)
Report Number(s):
T-48
TT-64 71243
Monitor Series:
64 71243
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604919
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE PSYCHOLOGIST IN INTERDISCIPLINARY RESEARCH,
Personal Author(s):
Harman,Harry H
Report Date:
25 Jul 1955
Media Count:
10 Page(s)
Report Number(s):
P-708
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:

(U) An analysis of the development of interdisciplinary research programs and the role of the psychologist in such programs is presented. A training program for the psychologist engaged in interdisciplinary activities is suggested.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604510

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NUMERICAL SOLUTIONS OF SPHERICAL BLAST WAVES,

Personal Author(s):

Brode,H L

Report Date:

18 Jul 1955

Media Count:

35 Page(s)

Report Number(s):

P-571-AEC (supp.)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Numerical solutions of spherical blast waves are illustrated by means of graphs.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604916

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL EQUATIONS IN THE THEORY OF DYNAMIC PROGRAMMING; V: POSITIVITY AND QUASI-LINEARITY,

Personal Author(s):

Bellman, Richard

Report Date:

11 Jul 1955

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) We determine conditions under which the solution of $u(p) = \text{Max sub } q L(u,p,q) + a(p,q)$ may be written $u(p) = \text{Max sub } q v(p,q)$, where $v(p,q)$ is the solution of $v(p) = L(v,p,q) + a(p,q)$ for arbitrary $q = q(p)$. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604917

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REDUCTION OF CONSTRAINED MAXIMA TO SADDLEPOINT PROBLEMS,

Personal Author(s):

Arrow, Kenneth J

Hurwicz, Leonid

Report Date:

07 Jul 1955

Media Count:

48 Page(s)

Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604757
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) RED STAR ON REFUELING AIRCRAFT IN THE AIR,
Personal Author(s):
Rusyantsev,Yu
Report Date:
05 Jul 1955
Media Count:
8 Page(s)
Report Number(s):
T-46
TT-64 71251
Monitor Series:
64 71251
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:
(U) The first part of the article discusses the advantages -increased flight range and maneuverability -- to be gained by single and multiple inflight refueling of high speed bombers and fighters. The second part of the article describes the two principal existing methods of aerial refueling -- the flying boom and the probe-anddrogue systems -- and discusses their relative advantages and disadvantages and the problems generally associated with serial refueling.
Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604639

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604639.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604639>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE OPTIMIZATION OF A QUADRATIC FUNCTION SUBJECT TO LINEAR CONSTRAINTS

Personal Author(s):

Markowitz, Harry

Report Date:

27 Jun 1955

Media Count:

35 Page(s)

Report Number(s):

RAND-P-637-REV

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607187

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME IMPLICATIONS OF 'WEAPONS SYSTEM SUPPORT' BY AMC,

Personal Author(s):

Enke,Stephen

Report Date:

27 Jun 1955

Media Count:

12 Page(s)

Report Number(s):

RM-1508

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Weapons systems support' by AMC promises to supply mobile combat units more effectively and to reduce present depot concentrations of some property subclasses. However, there will be a tendency to increase stock holdings as a result, and this aspect should be costed if possible. It is important too that the repair and procurement of common items continue to be on a commodity basis, and that subsidiary 'weapon support' ownership accounts are not allowed to develop. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604724

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME ASPECTS OF THE THEORY OF DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman,Richard

Report Date:

23 Jun 1955

Media Count:

13 Page(s)

Report Number(s):

P-696

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to furnish a simple introduction to the use of the theory of dynamic programming in treating multi-stage decision processes. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0111057

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE POLITICS OF GERMAN BUSINESS

Personal Author(s):

ALMOND, GABRIEL A

Report Date:

20 Jun 1955

Media Count:

1 Page(s)

Report Number(s):

RM1506-RC

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604725

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BRITAIN AND THE DEFENSE OF WESTERN EUROPE,

Personal Author(s):

DeWeerd,H A

Report Date:

20 Jun 1955

Media Count:

35 Page(s)

Report Number(s):

P-697

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The British attitude toward the concept of defending Western Europe and deterring aggression by means of an air-atomic weapons system and strategy is discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604565

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FULLY CONVEX NORMED LINEAR SPACES,

Personal Author(s):

Fan,Ky

Glicksberg,Irving

Report Date:

17 Jun 1955

Media Count:

17 Page(s)

Report Number(s):

P-588

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422835

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF MANAGEMENT TOOLS IN MAKING MILITARY DECISIONS.

Personal Author(s):

Novick,David

Fisher,G H

Report Date:

16 Jun 1955

Media Count:

27 Page(s)

Report Number(s):

P-694

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Microfilm only after original copies exhausted.

Abstract:

(U) Three broad classes of military decisions were singled out: (1) Research and development decisions: what equipment to develop so that at a future date (5-10 years hence) there will be a reasonably good menu of weapon system choices from which procurement decisions can be made. (2) Procurement decisions: what equipment, men, etc., to buy. (3) Operations decisions: how to deploy and use forces in being. A wide range of types of management tools were then related to these important classes of decisions, with a view to finding out which tools are most appropriate as aids to decision-making in each of the three areas. In this matching process special consideration was given to the role of financial management (budgeting and accounting). Broadly speaking, the conclusion is that financial management can probably make only minor contributions in the R + D and procurement areas of decision. In the realm of operations decisions, however, financial management has a potentially major role if it is used judiciously in conjunction with other types of management tools--particularly, operations research, statistical analysis, and industrial engineering techniques. As an aid to decision making in the R + D and procurement areas, systems analysis appears to be one of the most promising of the currently available management tools. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604719

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SYSTEM FOR CATALOGING REFERENCE MATERIAL,

Personal Author(s):

Johnson,R P

Blakeslee,D J

Skavdahl,H

Report Date:

07 Jun 1955

Media Count:

16 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The needle-sort card system for cataloging reference material is discussed. By this system, reports are cataloged according to subject matter by notching out appropriate holes that line the four edges of a card. The sorting process is then accomplished by inserting a needle into the proper row of holes in a deck of such cards, thus permitting the notched cards to separate from the deck. This permits a quick examination of an itimized summary of all available reports that might be of interest.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604765

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A PROBLEM OF THE COMPARISON OF TWO EMPIRICAL DISTRIBUTIONS,

Personal Author(s):

Gnedenko,B V

Rvacheva,E L

Report Date:

02 Jun 1955

Media Count:

8 Page(s)

Report Number(s):

T-45

TT-64 71259

Monitor Series:

64 71259

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method of solving the problem of the divergence of empirical distribution functions is presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604713

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET HIGH COMMAND AND GENERAL STAFF,

Personal Author(s):

GARTHOFF, Raymond L

Report Date:

27 May 1955

Media Count:

19 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion of the organization of Soviet Military forces is presented. The political and strategic problems facing the Soviet Union are also considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604714

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LINEAR PROGRAMMING AND ECONOMIC THEORY,

Personal Author(s):

Samuelson, Paul A

Report Date:

25 May 1955

Media Count:

19 Page(s)

Report Number(s):

P-685

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604806

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MONTE CARLO MODEL OF AN AIR FORCE TYPE SUPPLY SYSTEM,

Personal Author(s):

KARR,H W

Report Date:

24 May 1955

Media Count:

6 Page(s)

Report Number(s):

P-683-A

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the work at RAND on Air Force logistics, this tool of analysis has been applied to problems of Air Force inventory control and stock distribution using an IBM 701 computer. These problems are similar in many respects to the inventory and stocking problems in private industry and this paper is intended to give a very general description of one of these supply system models, in order to indicate the type of business inventory problems which can be studied by this method. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604647

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MATHEMATICAL ASPECTS OF SCHEDULING THEORY,

Personal Author(s):

Bellman, Richard

Report Date:

23 May 1955

Media Count:

75 Page(s)

Report Number(s):

P-651

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to formulate a number of significant mathematical problems which have arisen in connection with the theory of scheduling, and to discuss the methods which have been devised to treat these problems. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604701

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GENERAL TRANSFORMATION FOR ORTHOTROPIC PLANE STRESS AND PLANE STRAIN PROBLEMS,

Personal Author(s):

Lang, H A

Report Date:

23 May 1955

Media Count:

18 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is demonstrated that a single affine transformation of the type $x = ax'$, $y = by'$ immediately extends the solution of any isotropic plane stress or plane strain problem to the solution of an orthotropic plane problem where the orthotropic material is characterized by three independent constants. Since orthotropy, defined as elastic symmetry with respect to two orthogonal axes, implies four independent elastic constant, the affine transformation introduces a restriction upon the orthotropic shear modulus. The orthotropic shear modulus differs from that used by previous investigators. This difference alters the equation which the orthotropic stress function must satisfy and therefore, directly affects the solution to every plane stress or plane strain problem. Some arguments are advanced to favor the shear modulus, as here defined, whenever orthotropy must be restricted to three elastic constants. The two solutions of the orthotropic half plane subjected to a normal concentrated load are contrasted to illustrate the effect of the two definitions of orthotropic shear modulus. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604710

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CECH COMPACTIFICATIONS OF PRODUCTS,

Personal Author(s):

Glicksberg, Irving

Report Date:

16 May 1955

Media Count:

7 Page(s)

Report Number(s):

P-678

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this note is to point out the following easily obtained relationships between pseudo-compactness and Cech compactifications of certain product spaces: (a) If $\beta(X \times Y) = \beta(X) \times \beta(Y)$ and neither X nor Y is finite, then X , Y and $X \times Y$ are pseudo-compact; (b) if X and Y are pseudo-compact, and one is locally compact, $\beta(X \times Y) = \beta(X) \times \beta(Y)$; where $\beta(X)$ denotes the Cech compactification of X . Combined, the conditions yield one apparently new fact about pseudocompact spaces: A finite product of pseudo-compact spaces, all but one of them locally compact, is pseudo-compact. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604915

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REMARKS ON THE DESIGN, CONDUCT, AND ANALYSIS OF LARGE AIR EXERCISES,

Personal Author(s):

Peterson, N C

Report Date:

16 May 1955

Media Count:

22 Page(s)

Report Number(s):

P-700

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An analysis of operations research on Air force exercises is presented. The importance of adequate preparation, design, command and communication structures, and data collection is emphasized.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604706

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LINE BROADENING BY ELECTRONS: THE VALIDITY OF SIMPLE THEORIES,

Personal Author(s):

Meyerott,Roland E

Report Date:

09 May 1955

Media Count:

12 Page(s)

Report Number(s):

P-672

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A comparison is made between simple impact theories of line broadening by electrons (Weisskops, Lindholm, Inglis and Teller, Unsold) and recent more detailed quantum calculations by Kivel, Bloom and Margenau. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604705

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL EQUATIONS IN THE THEORY OF DYNAMIC PROGRAMMING: II: NONLINEAR
DIFFERENTIAL EQUATIONS,

Personal Author(s):

Bellman, Richard

Report Date:

05 May 1955

Media Count:

6 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The study of dynamic programming processes of continuous type gives rise to functional equations of the form $dx/dt = \text{Max}_q f(x, t; q)$. In this paper we present a summary of some basic results concerning the existence and uniqueness of solutions of this equation. Detailed results will appear subsequently.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604704

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TEMPERATURE BEHAVIOR OF THE THOMAS-FERMI STATISTICAL MODEL FOR ATOMS,

Personal Author(s):

Latter, Richard

Report Date:

25 Apr 1955

Media Count:

56 Page(s)

Report Number(s):

P-667

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The usual theoretical calculations of equations of state and specific heats, particularly at high temperatures and pressures, are dependent on the Thomas-Fermi statistical model of the atom. The mathematical description of this model involves complicated nonlinear differential equations, for which there have been an inadequate number of solutions available in the past. A number of solutions sufficiently extensive to determine the thermodynamic properties of all elements over an exceedingly wide range of temperatures and densities were obtained with the aid of an IBM 701 Defense Calculator. The results are presented in graphical form. In addition, some of the analytic properties of the Thomas-Fermi equations were investigated and certain approximate analytic solutions have been derived for limiting cases. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604702

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF MASS COMMUNICATIONS DURING THE BERLIN BLOCKADE,

Personal Author(s):

Davison,W P

Report Date:

22 Apr 1955

Media Count:

14 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A study of the Berlin blockade and airlift of 1948-49, is presented. The study offered an opportunity to examine the role of mass communications in a crisis situation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604769

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ATOMIC DEVELOPMENTS IN THE SOVIET UNION: AN ATOMIC INDUSTRY PROJECT AT ANGARA, SIBERIA AND URANIUM DEPOSITS IN THE SOVIET UNION. (TWO GERMAN NEWS ITEMS).

Report Date:

22 Apr 1955

Media Count:

8 Page(s)

Report Number(s):

T-43

TT-64 71263

Monitor Series:

64 71263

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Two reports on an atomic industry project at Angara, Siberia, and on uranium deposits in the USSR are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0090543

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE MODIFICATION OF THE RIGHT-HAND SIDE OF A LINEAR PROGRAMMING PROGRAMMING PROBLEM

Personal Author(s):

MARKOWITZ, HARRY

Report Date:

20 Apr 1955

Media Count:

4 Page(s)

Report Number(s):

RM-1470

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604694

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NUMERICAL SOLUTIONS OF THE THOMAS-FERMI STATISTICAL MODEL,

Personal Author(s):

Latter,R

Report Date:

15 Apr 1955

Media Count:

62 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Solutions of the zero-temperature Thomas-Fermi equation for an atomic system were obtained by numerical integration with the aid of the IBM 701 Defense Calculator. The complete range of atomic volumes of physical interest was covered in sufficient detail to permit accurate interpolation to intermediate regions. Tables of the potential distributions are given as well as of the important physical properties. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605014

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE MAX FLOW MIN CUT THEOREM OF NETWORKS,

Personal Author(s):

Dantzig,G B

Fulkerson,D R

Report Date:

15 Apr 1955

Media Count:

14 Page(s)

Report Number(s):

P-826

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that Menger's theorem and the Max Flow Min Cut Theorem on networks are applications of the duality theorem of linear inequality theory. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604651

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EEG, CONSCIOUSNESS, AND SLEEP,

Personal Author(s):

Simon, Charles W

Emmons, William H

Report Date:

15 Apr 1955

Media Count:

26 Page(s)

Report Number(s):

P-655

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Monopolar occipital and vertex EEGs were taken from 21 normal, male, alpha-dominant adults during an 8-hour sleep. Information was presented by means of a tape recorder during this period. Subjects reported if they heard the information during stimulation and were later tested, upon rising, to see if they could recall it. These two variables were correlated with electroencephalographic patterns occurring during the information presentation. The following conclusions were drawn: (1) the probability of remembering and responding to meaningful auditory stimulation increased as the quantity and quality of waking alpha within the immediate vicinity increased; (2) the absence of alpha does not mean unconsciousness; (3) the presence of delta is an indication of unconsciousness; unconsciousness is directly related to delta amplitude and inversely related to delta frequency; (4) Several seconds of EEG scored by eye is a reliable measure of the state of consciousness; and (5) Awakening from sleep or the borderline of sleep as a result of auditory stimulation may lead to patterns

showing special stimulus effects which fall along a consciousness continuum relative to the amount of alpha and delta within a pattern.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604650

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN AEROELASTIC PARAMETER FOR ESTIMATION OF THE EFFECTS OF FLEXIBILITY ON THE LATERAL STABILITY AND CONTROL OF AIRCRAFT,

Personal Author(s):

Rodden,W P

Report Date:

14 Apr 1955

Media Count:

13 Page(s)

Report Number(s):

P-654

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The importance of the estimation of flexibility effects on the maneuvering performance of an aircraft is known from the losses in lateral control and stability at high speeds. An aeroelastic parameter is introduced in a quasisteady analysis which separates the effects of Mach number from those of altitude on the lateral motion of a flexible wing. Its use is demonstrated by an application to a wing with one degree of freedom in roll and it is shown that the conventional stability derivatives can be modified to include the steady-state effects of flexibility. The determination of aileron reversal speed and applications for preliminary design are discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604648

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RECENT ADVANCES IN LINEAR PROGRAMMING,

Personal Author(s):

Dantzig, George B

Report Date:

12 Apr 1955

Media Count:

32 Page(s)

Report Number(s):

P-652

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Three topics: uncertainty, combinatorial problems, and large scale systems are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604712

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON A THEOREM OF DILWORTH,

Personal Author(s):

Fulkerson, D R

Report Date:

11 Apr 1955

Media Count:

7 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A theorem due to Dilworth on chain decompositions of partially ordered sets is shown to be a consequence of Menger's theorem in the theory of linear graphs. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604703

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PROPOSED MECHANISM OF FATIGUE FAILURE,

Personal Author(s):

Shanley,F R

Report Date:

11 Apr 1955

Media Count:

20 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Reversed slip is assumed to occur on a single plane, either from the beginning of repeated loading, or after an initial period of slip on different planes. Such slip requires unbonding of the atoms which emerge at the surface of the material. It is assumed that a portion of these atoms do not regain their original bond when the slip is reversed. This results in progressive unbonding along the slip plane. The proposed mechanism is shown to be in agreement with observed facts and is used as a basis for deriving

various well-known equations for the sigmaN diagram. The mechanism and equations are used to interpret and explain such phenomena as the endurance limit, effects of mean stress, variable amplitude loading, stress-concentration, elevated temperature, corrosion, and surface treatment.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604711

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ELIMINATION FORM OF THE INVERSE AND ITS APPLICATION TO LINEAR PROGRAMMING,

Personal Author(s):

Markowitz,Harry

Report Date:

08 Apr 1955

Media Count:

29 Page(s)

Report Number(s):

P-680

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses a particular product form of inverse which is closely related to the Gaussian elimination method of solving a set of simultaneous equations. This 'elimination form of the inverse' is especially valuable when A has a large number of zero coefficients. If A has no zero coefficients, on the other hand, the elimination form of inverse is still generally as convenient as the conventional A^{-1} .

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422834

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ACTIVITY ANALYSIS APPROACH TO LOCATION THEORY,

Personal Author(s):

Beckman,M

Marschak,T

Report Date:

05 Apr 1955

Media Count:

37 Page(s)

Report Number(s):

P649

Contract Number:

N6onr 25133

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604709

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTATION OF MAXIMAL FLOWS IN NETWORKS,

Personal Author(s):

Fulkerson,D R

Dantzig,G B

Report Date:

01 Apr 1955

Media Count:

18 Page(s)

Report Number(s):

P-677

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A simple computational method, based on the simplex algorithm of linear programming, is proposed for the following problem: 'Consider a network (e.g., rail, road, communication network) connecting two given points by way of a number of intermediate points, where each link of the network has a number assigned to it representing its capacity. Assuming a steady state condition, find a maximal flow from one given point to the other.' (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224373

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN OPTIMAL INVENTORY POLICY FOR A MILITARY ORGANIZATION.

Personal Author(s):

Berman, Edward B

Clark, Andrew J

Report Date:

30 Mar 1955

Media Count:

83 Page(s)

Report Number(s):

P647

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0090547

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DIFFERENTIAL GAMES IV: MAINLY EXAMPLES

Personal Author(s):

ISAACS, RUFUS

Report Date:

25 Mar 1955

Media Count:

1 Page(s)

Report Number(s):

RM-1486

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604918

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROJECT RAND,

Personal Author(s):

COLLBOHM,F R

Report Date:

24 Mar 1955

Media Count:

14 Page(s)

Report Number(s):

P707

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An analysis of the RAND corporation is presented. The development of the Air Force Research and Development program and its relationship with industry and science are described. The purpose of the program--scientific study and research on the broad subject of air warfare with the object of recommending to the Air Force preferred methods, techniques, and instrumentalities -- is discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604645

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE APPLICATION OF STATISTICAL METHODS TO THE DESIGN AND ANALYSIS OF EXPERIMENTS,

Personal Author(s):

Stoller,D S

Report Date:

22 Mar 1955

Media Count:

12 Page(s)

Report Number(s):

P-646

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper provides a general survey of some topics in statistics and operations research applicable to experimental design and analysis. It is based on the premise that how to measure and what to measure are simultaneous considerations in a test program. Furthermore, in order to verify that a test setup measures what it is supposed to measure it is necessary to design an experiment to this end and analyze the results. Three general topics in the design and analysis of experiments are: test criteria, test designs, and test analyses.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604625

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELASTIC STRESS WAVES PRODUCED BY PRESSURE LOADS ON A SPHERICAL SHELL,

Personal Author(s):

Huth,J H

Cole,J D

Report Date:

16 Mar 1955

Media Count:

50 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The memorandum treats the problem of stresses in a spherical elastic shell subjected to a plane pressure wave traveling across it with constant speed, a case of technical interest when considering the effect of blast waves on the structure of a missile in flight. The analysis is subject to the following principal assumptions: (1) The effect of the sphere on the wave is neglected; (2) Momentless thin shell theory is assumed to apply. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604218

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EXCHANGE BETWEEN QUANTITY AND QUALITY,

Personal Author(s):

Hirshleifer, Jack

Report Date:

15 Mar 1955

Media Count:

15 Page(s)

Report Number(s):

P-406

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) H. Theil has pointed out that under certain conditions the choice between quality and quantity of a commodity involves a consumer's budget line which is convex to the origin. This convexity leads to instability of the tangency solution if it should happen that the utility isoquant is of lesser curvature than the cost isoquant; when this is the case, the point of tangency will represent the worst rather than the best position along any given isoquant. It appears that quite plausible assumptions may lead to convex cost isoquants for the consumer, firm, or economy in spite of the fact that the marginal rate of substitution behaves rather strangely for such isoquants. The main purposes of this note are to look into the question of how general such isoquants and resulting instabilities may be in the quality-quantity problem, considering not merely the possible mathematical formulations of the cost function but also taking into account economic intuition.

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0604387

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EMPLOYMENT AND UNEMPLOYMENT IN THE USSR,

Personal Author(s):

EASON, Warren W

Report Date:

14 Mar 1955

Media Count:

67 Page(s)

Report Number(s):

P-551

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The principal purpose of the paper is to discuss the impact of Soviet planning and economic expansion on the supply of labor, with particular attention to the proportion of the population in the labor force and the distribution by economic sectors; and to examine trends in the percentage of full-time participation of the labor force.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604643

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PROBLEM OF AIMING AND EVASION,

Personal Author(s):

Isaacs,Rufus

Report Date:

14 Mar 1955

Media Count:

45 Page(s)

Report Number(s):

P-642

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The general problem of a marksman versus a mobile target, with a time lag in the gunner's information as to the target's position, is mathematically analyzed. Formulated in terms of game theory, the desiderata are: How should the target best maneuver to confound prediction of his position. How and when should the marksman make this prediction. What hit probability is to be expected when both participants behave optimally. The emphasis is on the marksman. He has no optimal strategy, but does have an ideal strategy with the property that every near optimal strategy is close to it. He also has a class of passive epsilon-strategies such that if and only if he obeys their dictates will he either come within epsilon of the best hit probability or else always remain in a position where it is possible to do so.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0449936

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/449936.pdf

Size: 889 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD449936>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PREDICTION OF CRATER DIMENSIONS FOR THE TEAPOT UNDERGROUND TEST

Descriptive Note:

Research memo.,
Personal Author(s):

Hill, J E

Gilvarry, J J

Report Date:

13 Mar 1955

Media Count:

17 Page(s)

Report Number(s):

RM-1449

X0-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for Public Release; Distribution Unlimited.

Abstract:

(U) Crater dimensions which may be anticipated for the underground explosions of a 1.2-KT nuclear device as part of the TEAPOT nuclear test series are discussed. Estimates are made on the basis of available crater measurements at the Nevada Test Site and appropriate scaling procedures. A value approximately half way between estimated upper and lower limits of 210 and 167 feet for the crater radius, or about 190 feet, is given. Other characteristic dimensions are estimated such as the diameter at the top of the lip, the height of the lip above the original surface, and the depths measured from the top of the lip or from the original surface. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604612

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LINEAR PROGRAMMING UNDER UNCERTAINTY,

Personal Author(s):

Dantzig, George B

Report Date:

08 Mar 1955

Media Count:

20 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A complete computation procedure is given for a special class of two-stage linear programming models in which allocations in the first stage are made to meet an uncertain but known distribution of demands occurring in the second stage. This case, applicable to many practical problems constitutes the principal part of the paper. Next, a class of models is considered where the activities are divided into two or more stages. The quantities of activities in the first stage are the only ones that can be determined in advance because those in the second and latter stages depend on the outcome of random events. Theorems on convexity of the objective (cost) functions are established for the general m-stage case. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604632

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MARKETS AS COOPERATIVE GAMES,

Personal Author(s):

Shapley, L S

Report Date:

07 Mar 1955

Media Count:

7 Page(s)

Report Number(s):

P-629

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Markets are formulated as cooperative n-person games in which the players are divided into two camps, the buyers and the sellers, with some kind of profitable exchange going on between them. The solutions of several examples are discussed and a general notion of 'abstract market game' is defined.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604388

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE 'BANG-BANG' CONTROL PROBLEM,

Personal Author(s):

Bellman,Richard

Glicksberg,Irving

Gross,Oliver

Report Date:

02 Mar 1955

Media Count:

21 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Let S be a physical system whose state at any time is described by an n -dimensional vector $x(t)$, where $x(t)$ is determined by a linear differential equation $\dot{Z} = Az$, with A a constant matrix. Application of external influences will yield an inhomogeneous equation, $\dot{Z} = Az + f$, where f , the 'forcing term', represents the control. A problem of some importance in the theory of control circuits is that of choosing f so as to reduce z to 0 in minimum time. If f is restricted to belong to the class of vectors

whose i (th) components can assume only the values $=b_i$, the control is said to be of the 'bang-bang' type. The case where all the solutions of $Z = Az$ approach zero as t approaches infinity is considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604641

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES IN THE THEORY OF DYNAMIC PROGRAMMING. IV: A VARIATIONAL PROBLEM WITH CONSTRAINTS,

Personal Author(s):

Bellman, Richard

Report Date:

28 Feb 1955

Media Count:

25 Page(s)

Report Number(s):

P-640

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to illustrate how the functional equation technique of the theory of dynamic programming may be employed to treat a class of variational problems with constraints.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604640

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VARIATIONAL PROBLEMS WITH CONSTRAINTS,

Personal Author(s):

Bellman,R

Fleming,W H

Widder,D V

Report Date:

23 Feb 1955

Media Count:

40 Page(s)

Report Number(s):

P-639

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem considered is that of maximizing an integral $\int F(x,y)dt$ subject to $x' = G(x,y)$, $x(O) = c$, and $O \text{ or } = y \text{ or } = x$. An essentially new feature is determining in what regions $y = x$, $O \neq x$, and $y = O$. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604638

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME NONCLASSICAL PROBLEMS IN THE CALCULUS OF VARIATIONS,

Personal Author(s):

Bellman,R

Glicksberg,I

Gross,O

Report Date:

17 Feb 1955

Media Count:

14 Page(s)

Report Number(s):

P-636

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to illustrate the application of the min-max theorem of game theory to the solution of some classes of variational problems involving nonanalytic functionals. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0086710

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A RESOURCE ALLOCATION PROBLEM IN CONTINUOUS FORM

Personal Author(s):

FLEMING, W H

Report Date:

16 Feb 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604637

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PERTURBATION METHODS IN APPLIED MATHEMATICS,

Personal Author(s):

Bellman, Richard

Report Date:

10 Feb 1955

Media Count:

14 Page(s)

Report Number(s):

P-635

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper presents a simple technique which will in many cases increase the range of effectiveness of perturbation and power series methods in situations in which the equations treated contain parameters which assume only positive values. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604635

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604635.pdf

Size: 987 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604635>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Similarity Solution for a Spherical Shock Wave

Personal Author(s):

Latter, Richard

Report Date:

03 Feb 1955

Media Count:

27 Page(s)

Report Number(s):

P-633

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The point-source, spherical shock wave moving into a constant density, Gamma-law gas is considered in the limit of infinite shock strength from the point of view of the Richtmyer-von Neumann viscosity technique. A similarity solution of this problem is shown to exist and is obtained for various boundary conditions with $\Gamma = 1.4$. The solutions are obtained analytically in that part of the flow field not involving viscosity, and numerically in the other parts of the flow field. It is found that whereas all discontinuities of the physical parameters are removed by the viscosity there remain discontinuities in the slopes of these parameters at the shock-front. It is indicated, moreover, that the complete flow field depends upon the form and magnitude of the viscosity.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604562

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE BLAST FROM A SPHERE OF HIGH PRESSURE GAS,

Personal Author(s):

BRODE,H L

Report Date:

27 Jan 1955

Media Count:

30 Page(s)

Report Number(s):

P-582

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The gas dynamics resulting from the release of an isothermal sphere of gas initially at rest and at a high pressure are described by the numerical solution of the differential equations which represent an ideal gas in radial motion. The resulting outward shock and the inward rarefactions and shocks are described in some detail and are compared with the gas dynamics of the point-source solution. The existence of the inward moving shocks is observed in the present calculations to occur repeatedly, subjecting the origin to several compressive waves which are reflected there and which move out to overtake the main shock. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604634

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES IN THE THEORY OF DYNAMIC PROGRAMMING. III: EQUIPMENT REPLACEMENT POLICY,

Personal Author(s):

Bellman,Richard

Report Date:

26 Jan 1955

Media Count:

8 Page(s)

Report Number(s):

P-632

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The functional equation technique of the theory of dynamic programming is applied to the theory of equipment replacement. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604633

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES IN THE THEORY OF DYNAMIC PROGRAMMING. II: A FUNCTIONAL EQUATION ARISING IN ALLOCATION THEORY,

Personal Author(s):

Bellman, Richard

Report Date:

25 Jan 1955

Media Count:

9 Page(s)

Report Number(s):

P-631

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The structure of the solution of $f(x) = \text{Max } (0yx) (g(y)+h(x-y)+f(ay+b(x-y)))$, in the case where g and h are concave is derived.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604631

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE USE OF THE GENERAL BENDING FORMULA,

Personal Author(s):

Rodden,W P

Report Date:

18 Jan 1955

Media Count:

4 Page(s)

Report Number(s):

P-626

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604630

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLIFIED EXPRESSION FOR THE DIHEDRAL EFFECT OF A FLEXIBLE WING,

Personal Author(s):

Rodden,W P

Report Date:

18 Jan 1955

Media Count:

4 Page(s)

Report Number(s):

P-625

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) By making two reasonable approximations a variation of sideslip rolling moment coefficient with load factor was obtained for an airplane. The first approximation is to replace the wing normal load factor by the airplane normal load factor; the second is to assume the wing deflection mode to be parabolic.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604623

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PRODUCTION SMOOTHING PROBLEM,

Personal Author(s):

Johnson,Selmer

Dantzig,George

Report Date:

06 Jan 1955

Media Count:

29 Page(s)

Report Number(s):

P-610

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A single item is to be produced over a given number of time periods to satisfy known future requirements while minimizing costs where the costs per unit for production, storage, and change in production rate are known functions of time. While such a problem can be solved by regular linear programming methods, the novel feature here is that the primal and dual problems are solved jointly by means of a rapid graphical method involving only intersections and rotations of straight lines. The underlying reason for this stems from a special property of the near 'square block triangular' nature of the coefficient matrix. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0090509

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/090509.pdf

Size: 983 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD090509>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DIFFERENTIAL GAMES III: THE BASIC PRINCIPLES OF THE SOLUTION PROCESS

Personal Author(s):

ISAACS, RUFUS

Report Date:

21 Dec 1954

Media Count:

25 Page(s)

Report Number(s):

RAND-RM-1411

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604628

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) QUALITATIVE AND QUANTITATIVE PROCEDURES IN CONTENT ANALYSIS,

Personal Author(s):

George,Alexander L

Report Date:

15 Dec 1954

Media Count:

38 Page(s)

Report Number(s):

P-617

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the specialized terminology of propaganda analysis, it is useful to distinguish between statements confined to content description and those which constitute inferences from content about its antecedent conditions--e.g., propaganda goals, elite policy calculations, actual events. To avoid the confusion surrounding the distinction between quantitative and qualitative content analysis in the past, a new distinction is proposed, i.e., that between 'frequency' and 'non-frequency' content analysis: (a) If the propaganda analyst believes that the number of times a given content characteristic appears is significant for purposes of inference, this characteristic is regarded as a frequency indicator. (b)

However, if he decides that the mere presence or absence of a given content characteristic is significant, then it is regarded as a non-frequency indicator.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604627

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SCIENTIFIC STATUS OF PROPAGANDA ANALYSIS,

Personal Author(s):

George,Alexander L

Report Date:

15 Dec 1954

Media Count:

21 Page(s)

Report Number(s):

P-616

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) When content analysis is used in order to infer antecedent conditions of communication, as is the case in propaganda analysis, logical operations are employed which resemble those necessary to scientific explanation. However, inferences from content analysis do not easily meet the following several requirements of scientific explanation: that general laws be used as part of the explanation; that the phenomenon to be explained be precisely designated; that all relevant antecedent conditions be identified; that the explanation (antecedent conditions and general laws) should bear a logical relationship to the phenomenon explained. In one form in which it was applied, content analysis appears to depart further from scientific inquiry in that it deals with the actual words of the communication and not with a characterization of the communication arrived at by the analyst. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604626

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PSYCHOLOGICAL ASPECTS OF FOREIGN POLICY,

Personal Author(s):

Speier,Hans

Davison,W Phillips

Report Date:

15 Dec 1954

Media Count:

48 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) All major actions in international relations have psychological implications and can be psychologically sound or unsound. A foreign policy which is psychologically sound attempts to maximize the desirable effects of action and minimize the undesirable effects in such ways as the following: by taking account of the social and psychological characteristics of politically significant groups abroad; by considering questions of optimum timing and surprise in the light of these characteristics; by paying attention to the possibility of exploiting initial successes; or by permitting or not permitting another power to save face. In these and similar ways, the political strategist attempts to supplement military and economic power by taking advantage of existing social and psychological forces to influence the behavior of various individuals and groups abroad in a desired direction. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604564

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOCIAL INTERACTION,

Personal Author(s):

Bales,Robert F

Report Date:

14 Dec 1954

Media Count:

28 Page(s)

Report Number(s):

P-587

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Social interaction and group dynamics are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604325

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME NOTES ON THE EVOLUTION OF AIR DOCTRINE,

Personal Author(s):

Brodie,Bernard

Report Date:

01 Dec 1954

Media Count:

32 Page(s)

Report Number(s):

P-527 rev.

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604646

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FIXED CHARGE PROBLEM,

Personal Author(s):

Hirsch, Warren M

Dantzig, George B

Report Date:

01 Dec 1954

Media Count:

22 Page(s)

Report Number(s):

P-648

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A fundamental unsolved problem in the programming area is one in which various activities have fixed charges (e.g., set-up time charges) if operating at a positive level. Properties of a general solution to this type problem are discussed in this paper. Under special circumstances it is shown that a fixed charge problem can be reduced to an ordinary linear programming problem. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0086481

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE CONTINUOUS SIMPLEX METHOD

Personal Author(s):

LEHMAN, R SHERMAN

Report Date:

01 Dec 1954

Media Count:

55 Page(s)

Report Number(s):

RM-1386

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0090492

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DIFFERENTIAL GAMES II: THE DEFINITION AND FORMULATION

Personal Author(s):

ISAACS, RUFUS

Report Date:

30 Nov 1954

Media Count:

1 Page(s)

Report Number(s):

RM-1399

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0090493

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DIFFERENTIAL GAMES I: INTRODUCTION

Personal Author(s):

ISAACS, RUFUS

Report Date:

30 Nov 1954

Media Count:

1 Page(s)

Report Number(s):

RM-1391

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0086396

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) STATUS OF SOLUTION OF LARGE SCALE LINEAR PROGRAMMING PROBLEMS

Personal Author(s):

DANTZIG, GEORGE B

Report Date:

30 Nov 1954

Media Count:

9 Page(s)

Report Number(s):

RM-1375

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604618

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET ATTITUDES TOWARD MODERN AIR POWER,

Personal Author(s):

Garthoff, Raymond L

Report Date:

29 Nov 1954

Media Count:

12 Page(s)

Report Number(s):

P-603

Report Classification:

Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604619
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE IMPACT OF AIR POWER ON THE INTERNATIONAL SCENE, 1933-1940,
Personal Author(s):
Dinerstein, Herbert S
Report Date:
29 Nov 1954
Media Count:
17 Page(s)
Report Number(s):
P-604
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:
(U) The paper discusses Western European attitudes toward air power between 1933 and 1940.
Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604620
Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS: VOLUME 20,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

24 Nov 1954

Media Count:

6 Page(s)

Report Number(s):

P-607

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of Chi-Square integrals are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604786

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DIFFUSION OF METEORIC TRAILS,

Personal Author(s):

Dobrovol'skii,O V

Report Date:

22 Nov 1954

Media Count:

24 Page(s)

Report Number(s):

T-39

TT-64 71280

Monitor Series:

64 71280

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Application of the theory of diffusion to the phenomenon of meteoric trails enables the derivation from astronomical observations of a convenient method for determining the coefficient of diffusion at great altitudes where direct determinations are impossible or unfeasible. Analysis of the numerical magnitude of the coefficient of diffusion confirms the hypothesis of the turbulent nature of diffusion, and also the hypothesis that the coefficient of diffusion is a measure of the vertical mixing of the atmosphere. This mixing is inherent in the atmosphere as such, and is not introduced from outside by a meteoric body; this follows not only from the smallness of the corresponding Reynolds number, but also from the duration of the process of mixing, which does not decline noticeably even after an interval of the order of one hour after the passage of the meteor. In addition to its acknowledged significance in determining the direction and speed of stratospheric currents, observation of meteoric trails is acquiring new geophysical significance as a means of studying vertical mixing. New light is also being shed on the problem of the conditions under which enduring ionized trails of meteors appear. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604617

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONCEPTS AND COMPUTING PROCEDURES FOR CERTAIN X SUB IJ PROGRAMMING PROBLEMS,

Personal Author(s):

Markowitz, Harry

Report Date:

19 Nov 1954

Media Count:

45 Page(s)

Report Number(s):

P-602

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper defines and applies certain concepts helpful in the analysis of such X_{ij} models; it presents special computing techniques for the C_i and C_{ij} analyses; and discusses the properties, solution and application of 'embedded' X_{ij} models.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604616

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS: VOLUME 19,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

18 Nov 1954

Media Count:

7 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of Chi-Square integrals are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604613

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND A NEW FORMALISM IN THE CALCULUS OF VARIATIONS I,

Personal Author(s):

Bellman, Richard

Report Date:

15 Nov 1954

Media Count:

29 Page(s)

Report Number(s):

P-597

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Various problems in the calculus of variations are considered as continuous decision processes. It is shown that the methods of the theory of dynamic programming may be utilized to yield functional equations of a new type and successive approximations of monotone type to the solutions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604391

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UNIVARIATE TWO-POPULATION DISTRIBUTIONFREE DISCRIMINATION,

Personal Author(s):

STOLLER, D S

Report Date:
15 Nov 1954
Media Count:
12 Page(s)
Report Number(s):
P-556
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604515
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) PROBLEMS OF INTERPLANETARY FLIGHTS,
Personal Author(s):
Stanyukovich,K
Report Date:
15 Nov 1954
Media Count:
10 Page(s)
Report Number(s):
T-38
TT-64 71244
Monitor Series:
64 71244
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Great are the achievements of modern science and technology. Science, said President of the Academy of Sciences in U.S.S.R., A. N. Nesmeyanov, at the session of the World Peace Council on 27 November 1953, has reached such a state wherein the dispatch of a stratoplane to the Moon and the

creation of an artificial satellite of the Earth are a reality. Our Soviet scientists and designers, who are devoting all their strength and knowledge to the cause of the further progress and prosperity of our Motherland, have made an enormous contribution to the solution of the very important problems of interplanetary flights.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604614

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNICATING RESEARCH RESULTS,

Personal Author(s):

Haydon,Brownlee

Report Date:

15 Nov 1954

Media Count:

12 Page(s)

Report Number(s):

P-599

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604611

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATION, VOLUME 18,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

11 Nov 1954

Media Count:

6 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of Chi-Square integrals are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604610

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON MATRIX THEORY, VI,

Personal Author(s):

Bellman,Richard

Glicksberg,Irving

Gross,Oliver

Report Date:

10 Nov 1954

Media Count:

5 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An identity in matrix theory is derived which yields a number of interesting inequalities. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604609

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DECISION-MAKING IN THE FACE OF UNCERTAINTY, II,

Personal Author(s):

Bellman,Richard

Report Date:

08 Nov 1954

Media Count:

12 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Multi-stage processes involving both zero-sum and non-zero sum games are considered. Using the concept of 'games of survival', approximate solutions for both classes of multi-stage games under various realistic assumptions are derived. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604559

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MACHINE TESTING FOR DEVIATION OF DATA FROM A POISSON DISTRIBUTION,

Personal Author(s):

HADDEN,F A

Report Date:

08 Nov 1954

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In a population of events that are normally expected to occur according to the Poisson distribution, certain events may occur as the results of special factors which operate in relation to them only. In such cases, these specially influenced events will not fall within the Poisson distribution that describes the rest of the population. It may be desirable to study the factors causing their peculiar occurrence, and this will require that the abnormally occurring events be separated from the normally occurring ones. This paper outlines a practical machine method for making this kind of separation for any data that is Poisson distributed. For clarity, the techniques will be described in terms of a particular example, the in-flight failure of vacuum tubes in a piece of airborne electronic equipment. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604608

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOLUME 17,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

05 Nov 1954

Media Count:

6 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of Chi-Square integrals are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604566

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND MULTI-STAGE DECISION PROCESSES OF STOCHASTIC TYPE,

Personal Author(s):

Bellman,Richard

Report Date:

02 Nov 1954

Media Count:

20 Page(s)

Report Number(s):

P-589

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is a summary of some applications of the theory of dynamic programming to various classes of multi-stage decision problems of stochastic type. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604607

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON THE MEAN VALUE OF RANDOM DETERMINANTS,

Personal Author(s):

Bellman,Richard

Report Date:

02 Nov 1954

Media Count:

5 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An explicit expression for the moments of a random determinant is presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604380

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON PLASTIC TORSION,

Personal Author(s):

HUTH,J H

Report Date:

26 Oct 1954

Media Count:

18 Page(s)

Report Number(s):

P-541

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The note presents numerical treatments of the torsion of a square rod for a material exhibiting strain hardening. Conclusions are drawn concerning the feasibility of the methods and a comparison is made between the deformation and flow theories. The latter theory is restricted to the special case of Laning's stress-strain relation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604563

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PROBLEM IN THE SEQUENTIAL DESIGN OF EXPERIMENTS,

Personal Author(s):

Bellman, Richard

Report Date:

20 Oct 1954

Media Count:

18 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) THE PROBLEM OF DETERMINING AN OPTIMAL TESTING POLICY WHERE ONE SIMULTANEOUSLY GAINS AND LEARNS FOR THE CASE WHERE THE OUTCOME OF ONE CHOICE IS KNOWN AND THE OTHER

IS SUBJECT TO A KNOWN A PRIORI DISTRIBUTION IS CONSIDERED. Results of Johnson and Karlin, P-328, are obtained in a different way and extended. The methods used are applicable to more general processes. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422831

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GAMING AS A TECHNIQUE OF ANALYSIS,

Personal Author(s):

Mood,A M

Specht,R D

Report Date:

19 Oct 1954

Media Count:

14 Page(s)

Report Number(s):

P579

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422828

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CRITICAL REVIEW OF THE "LEARN-WHILE-YOUSLEEP" STUDIES,

Personal Author(s):

Simon, Charles W

Emmons, William H

Report Date:

14 Oct 1954

Media Count:

35 Page(s)

Report Number(s):

P534

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Ten sleep-learning studies were reviewed. A critical analysis was made of their experimental design, statistics, methodology, and criteria of sleep. It is highly speculative whether or not the studies reviewed in this paper have presented any acceptable evidence that learning during sleep is possible. The inadequate control of a number of experimental variables makes the validity of the conclusions drawn by many of the Es unwarranted. The conditions under which the results were found tends more to support the contention that some learning takes place in a special kind of waking state wherein Ss do not apparently remember later on if they had been awake. This may be of great practical importance from the standpoint of economy in study time, but it cannot be construed as sleep-learning. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604561

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON INFRARED STELLAR MAGNITUDES,

Personal Author(s):

Larmore, Lewis

Report Date:

13 Oct 1954

Media Count:

10 Page(s)

Report Number(s):

P-581

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The luminous efficiencies of the eye and a lead sulphide detector have been computed for black-body radiation over the range of temperatures from 300K to 25,000K. The ratio of these efficiencies is used to compute the infrared color index of stars from type M to type B of the spectral series; the infrared color index is here defined as the visual magnitude minus infrared magnitude, with the difference adjusted to give zero for type AO stars. The computed values of the infrared color indices are compared with those measured by Fellgett, and surprisingly good agreement is obtained. The greatest discrepancy is found for B-type stars. The discrepancies are discussed for particular stars. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604324

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POSSIBLE U. S. MILITARY STRATEGIES,

Personal Author(s):

Brodie, Bernard

Report Date:

11 Oct 1954

Media Count:

21 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604401

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REVIEW OF SVEN RYDENFELT'S COMMUNISM IN SWEDEN,

Personal Author(s):

DAVISON,W P

Report Date:

08 Oct 1954

Media Count:

40 Page(s)

Report Number(s):

P-570

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Sven Rydenfelt's 'Communism in Sweden' analyzes the reasons why Swedes have--or have not--voted the communist ticket in parliamentary elections. It throws new light on the relationship between religion and voting behavior, economic conditions and the communist vote, and the role of the non-communist Left in undercutting the Communist Party in Sweden. Because this study may help illuminate the problem of the communist vote in other countries, the present synoptic review will be made available to interested persons and agencies. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604406

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON AN ITERATIVE PROCEDURE FOR OBTAINING THE PERRON ROOT OF A POSITIVE MATRIX,

Personal Author(s):

Bellman,Richard

Report Date:

05 Oct 1954

Media Count:

12 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An iterative procedure for obtaining the characteristic root of largest absolute value of a positive matrix, the Perron Root, is derived which yields geometric convergence. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604621

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DIGITAL COMPUTER, WHERE DOES IT GO FROM HERE,

Personal Author(s):

Ware,Willis H

Report Date:

05 Oct 1954

Media Count:

19 Page(s)

Report Number(s):

P-608

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The modern digital computing system can range from a 100 tube device the size of a desk to a many thousand tube device weighing several tons. Some machines may perform 10,000 operations per second; others, only a few hundred. In common, however, they all exhibit when compared to a competing system staffed by people, a phenomenal record for freedom from error plus some measure of increased rate of production. The paper presents a short back ground of this new field of electronic computing machinery and briefly examines the characteristics of the modern machine, its applications, the difficulties of using it, and the limitations imposed on it by the present state of the electronic art. A forecast of probable future trends in application is given, together with a discussion of the expected advances in the technique and physical hardware and in the logical organization of such machines.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293674

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UPPER BOUNDS, SECONDARY CONSTRAINTS, AND BLOCK TRIANGULARITY IN LINEAR PROGRAMMING

Personal Author(s):

DANTZIG,GEORGE B

Report Date:

04 Oct 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Short cut computational methods are developed for solving systems whose matrices may be generally described as block triangular. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604404

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND A NEW FORMALISM IN THE THEORY OF INTEGRAL EQUATIONS,

Personal Author(s):

Bellman, Richard

Report Date:

01 Oct 1954

Media Count:

8 Page(s)

Report Number(s):

P-574

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that the functional equation technique of the theory of dynamic programming may be used to derive functional differential equations for the characteristic values of a certain integral equation similar to those obtained for the eigenvalues of differential equations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604405

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A QUASI-LINEAR EQUATION,

Personal Author(s):

Bellman, Richard

Report Date:

01 Oct 1954

Media Count:

11 Page(s)

Report Number(s):

P-575

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper is to establish some limit theorems for the solutions of non-linear recurrence relations. Recurrence relations of this kind occur in various dynamic programming problems.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604403

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TECHNIQUES IN PUTTING FAILURE DATA TO WORK FOR MANAGEMENT,

Personal Author(s):

HADDEN, F A

Sepmeyer, L W

Report Date:

30 Sep 1954

Media Count:

21 Page(s)

Report Number(s):

P-573

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An extended field study was made of methods of failure reporting and of machine reduction, analysis, and presentation of failure data. The paper presents the results of this study, and shows how a field failure reporting system can be used as a tool for control of equipment reliability. The system developed as a result of the field study is described in some detail. The discussion in the body of the text covers report and presentation forms; techniques of gathering, analyzing, and presenting the data; mathematical considerations on which the analysis is based; and management's use of the data to improve reliability and spare parts supply. Appendices provide more detailed statements on these topics, including an abstract of the machine procedures required to produce the tabulations illustrated.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604402

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE OPTIMAL INVENTORY EQUATION,

Personal Author(s):

Bellman,Richard

Glicksberg,Irving

Gross,Oliver

Report Date:

28 Sep 1954

Media Count:

7 Page(s)

Report Number(s):

P-572

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A summary is presented of some results recently obtained in connection with the problem of optimal inventory. Solutions are given for the case of proportional costs and arbitrary demand, and for the case where the costs are linear constant terms representing administrative costs. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604399

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604399.pdf

Size: 249 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604399>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DECISION MAKING IN THE FACE OF UNCERTAINTY: 1 (UNCERTAIN OUTCOME)

Personal Author(s):

Bellman, Richard

Report Date:

21 Sep 1954

Media Count:

8 Page(s)

Report Number(s):

P-568

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) A number of simple multi-stage decision processes where the intuitive concept of maximizing expected gain over expected cost is valid are considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604134

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPLICATION OF MARKOV PROCESSES TO THE STUDY OF THE EPIDEMIOLOGY OF MENTAL DISEASE,

Personal Author(s):

Marshall,Andrew W

Goldhamer,Herbert

Report Date:

21 Sep 1954

Media Count:

52 Page(s)

Report Number(s):

P-311

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the studies the emphasis is on the applied mathematical statistics and model construction of simple Markov processes. The models are very simple ones and in their present form are intended only to provide rough estimates of certain epidemiological parameters that are not directly observable or that can be secured only by expensive and time-consuming field surveys. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604385

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IS DISPERSAL GOOD DEFENSE.

Personal Author(s):

Cooper,Gershon

mcKean,Roland N

Report Date:

15 Sep 1954

Media Count:

17 Page(s)

Report Number(s):

P-548

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses the idea of dispersal as a national defense measure.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293678

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME FUNCTIONAL EQUATIONS IN THE THEORY OF DYNAMIC PROGRAMMING. I. FUNCTIONS OF POINTS AND POINT TRANSFORMATIONS

Personal Author(s):

BELLMAN,R

Report Date:

15 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604289

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE CRANK-NICOLSON PROCEDURE FOR SOLVING PARABOLIC PARTIAL DIFFERENTIAL EQUATIONS,

Personal Author(s):

Juncosa,M L

Young,David

Report Date:

13 Sep 1954

Media Count:

29 Page(s)

Report Number(s):

P-465

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Proof of convergence of the Crank-Nicolson procedure, an 'implicit' numerical method for solving parabolic partial differential equations, is given for the case of the classical 'problem of limits' for one-dimensional diffusion with zero boundary conditions. Orders of convergence are also given for different classes of initial functions. Results do not support the validity of socalled 'h2-extrapolation' in some cases. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422830

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONSIDERATIONS FOR RESEARCH IN A SLEEP-LEARNING PROGRAM,

Personal Author(s):

Simon, Charles W

Emmons, William H

Report Date:

13 Sep 1954

Media Count:

69 Page(s)

Report Number(s):

P565

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0085990

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE COMPUTATIONAL SOLUTION OF SOME FUNCTIONAL EQUATIONS IN THE THEORY OF
DYNAMIC PROGRAMMING

Personal Author(s):

BELLMAN, RICHARD

Report Date:

09 Sep 1954

Media Count:

6 Page(s)

Report Number(s):

RM-1336

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604398

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CONSTRUCTIVE PROOF OF THE MIN-MAX THEOREM,

Personal Author(s):

Dantzig, George B

Report Date:

08 Sep 1954

Media Count:

18 Page(s)

Report Number(s):

P-564

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Microfiche only after original copies are exhausted.

Abstract:

(U) A short algebraic proof of the fundamental theorem of games is given that is elementary and constructive. A simple example illustrates the method. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605063

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WAR GAMING AS A TECHNIQUE OF ANALYSIS,

Personal Author(s):

Mood,Alexander M

Report Date:

03 Sep 1954

Media Count:

14 Page(s)

Report Number(s):

P-899

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The technique of war gaming is modified to make it a method for solving problems previously thought to be beyond analysis and answerable only by appeal to the judgment of experts.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604318

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MONOTONE CONVERGENCE IN DYNAMIC PROGRAMMING AND THE CALCULUS OF VARIATIONS,

Personal Author(s):

Bellman, Richard

Report Date:

03 Sep 1954

Media Count:

9 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the present paper we show that the method of 'approximation in policy space,' developed in the theory of dynamic programming, yields monotone convergence in the calculus of variations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604396

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Revisions and Extensions to the Simplex Method (with Side-Lights on Programming Techniques),

Personal Author(s):

Orchard-Hays, William

Report Date:

02 Sep 1954

Media Count:

23 Page(s)

Report Number(s):

P-562

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Modification in various ways of the simplex algorithm for solving linear programming problems and its implications for flexibility and adaptability in a computer code is examined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604395

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PROBLEM OF ROUTING AIRCRAFT, A MATHEMATICAL SOLUTION,

Personal Author(s):

Ferguson,A R

Dantzig,G B

Report Date:

01 Sep 1954

Media Count:

30 Page(s)

Report Number(s):

P-561

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method for assigning a given fleet of several different types of aircraft to carry an anticipated traffic load over several routes at minimum cost is presented and explained. The application of linear programming to transportation problems of this general type is illustrated.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0090504

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE PROBLEM OF ROUTING AIRCRAFT:A MATHEMATICAL SOLUTION

Personal Author(s):

FERGUSON, A R

DANTZIG, G B

Report Date:

01 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604394

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET HEAVY INDUSTRY: A DOLLAR INDEX OF OUTPUT, 1927/28-1937,

Personal Author(s):
Gerschenkron,Alexander
Report Date:
30 Aug 1954
Media Count:
27 Page(s)
Report Number(s):
P-560
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604518
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/604518.pdf
Size: 453 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604518>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) RED STAR SERIES ON ATOMIC WEAPONS AND ANTIATOMIC DEFENSE. PART 6. DEACTIVATION OF
CONTAMINATED TERRAIN
Personal Author(s):
Glushko, A
Report Date:
28 Aug 1954
Media Count:
9 Page(s)
Report Number(s):
T-41-PT-6
TT-64-71246
FTD-TT-64-71246
XC-TT-64-71246

Monitor Series:

TT-64-71246

FTD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The article deals with specific methods to be used in the field for deactivating radioactively contaminated terrain.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604622

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A LINEAR PROGRAMMING SOLUTION TO DYNAMIC LEONTIEF TYPE MODELS,

Personal Author(s):

Wagner,Harvey M

Report Date:

27 Aug 1954

Media Count:

59 Page(s)

Report Number(s):

P-609

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents a general dynamic model of an economy and attempts to answer a number of questions dealing, for example, with the feasibility of certain time profiles of demand, the rate of substitution between economic activities taking place in different time periods, economic growth, and industrial cycles; undoubtedly there are many more applications of the general model. The solutions to the questions involve the application of linear programming to a standard Leontief input-output flow matrix and a capital building matrix. In addition the paper proposes a method which is designed to reduce computation time considerably. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0628726

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC WEAPONS AND ANTIATOMIC DEFENSE. PART V. ENGINEERING PREPARATION OF THE TERRAIN,

Personal Author(s):

Krieger, F J

Report Date:

26 Aug 1954

Media Count:

10 Page(s)

Report Number(s):

T-41

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The article is concerned with the problems of digging in and preparing earthen shelters for both men and materiel in case of atomic attack.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604393

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS: VOLUME 16,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

25 Aug 1954

Media Count:

6 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of Chi-Square integrals are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604517

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604517.pdf

Size: 485 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604517>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC WEAPONS AND ANTIATOMIC DEFENSE. PT. 4. UTILIZING THE PROTECTIVE PROPERTIES OF THE TERRAIN

Personal Author(s):

Krieger, F J

Report Date:

25 Aug 1954

Media Count:

9 Page(s)

Report Number(s):

TT-64-71245

T-41

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The article is concerned with the problems of ascertaining and utilizing as protection, in case of atomic attack, such properties of the terrain as the relief (differences in elevation), woods, buildings, and other local objects. It is concluded that the protective properties of the terrain can be ascertained only after a careful study of it, a good knowledge of the peculiarities of the relief which can resist the destructive action of an atomic explosion. Utilizing the protective properties of the terrain does not free troops from carrying on engineering work with respect to anti-atomic defense. Improvement of the protective properties of the terrain by building engineering structures must be carried out by troops uninterruptedly. This will raise the degree of their protection against atomic weapons, will promote the conduct of active combat operations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604400

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MINIMIZING THE NUMBER OF CARRIERS TO MEET A FIXED SCHEDULE,

Personal Author(s):

DANTZIG,G B

Fulkerson,D R

Report Date:

24 Aug 1954

Media Count:

13 Page(s)

Report Number(s):

P-569

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that the problem of determining the minimum number of carriers required to meet a fixed schedule of transportation can be made into a linear programming problem. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0090503

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MINIMIZING THE NUMBER OF CARRIERS TO MEET A FIXED SCHEDULE

Personal Author(s):

DANTZIG, G B

FULKERSON, D R

Report Date:

24 Aug 1954

Media Count:

1 Page(s)

Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0085982
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) STATISTICAL THEORY OF NAVIGATION EMPLOYING INDEPENDENT INERTIAL AND VELOCITY
MEASUREMENTS: MINIMUM RMS ERROR IN COMPUTED POSITION
Personal Author(s):
SWERLING, P
REICH, E
Report Date:
17 Aug 1954
Media Count:
22 Page(s)
Report Number(s):
RM-1321
Contract Number:
AF 33(038)6413
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604390

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS: VOLUME 15,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

12 Aug 1954

Media Count:

6 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of Chi-Square integrals are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604392

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RATIONAL GAME ON THE SQUARE,

Personal Author(s):

Gross,O

Report Date:

10 Aug 1954

Media Count:

7 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An example is given of a two-person zero-sum game on the unit square, having as payoff a continuous rational function with rational coefficients and such that the only optimal strategy available to either player is the Cantor function. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604767

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604767.pdf

Size: 373 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604767>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC WEAPONS AND ANTIATOMIC DEFENSE. PART 2. ATOMIC WEAPONS AND ANTIATOMIC DEFENSE

Personal Author(s):

Olisov, B

Krieger, F J

Report Date:

Aug 1954

Media Count:

10 Page(s)

Report Number(s):

T-41-PT-2

TT-64-71261

XA-BMD

Monitor Series:

BMD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The article discusses protection from shock waves in atomic attack.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604389

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DIAGRAM OF THE STRUCTURE OF THE UPPER ATMOSPHERE,

Personal Author(s):

Kellogg, William W

Report Date:

01 Aug 1954

Media Count:

4 Page(s)

Report Number(s):

P-554

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The diagram is designed to portray some of the physical features of the upper atmosphere. The ordinate is height (up to 400 km), and the distribution of some important parameters are plotted, accompanied by the levels at which various chemical and physical processes occur. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604386

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE THEORY OF DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman, Richard

Report Date:

30 Jul 1954

Media Count:

25 Page(s)

Report Number(s):

P-550

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is the text of an invited address before the annual summer meeting of the American Mathematical Society at Laramie, Wyoming, September 2, 1954. The contents are chiefly of an expository nature on the theory of dynamic programming.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604383

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604383.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604383>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COLD WATER ON SALT WATER

Personal Author(s):

Taylor, William W

Report Date:

16 Jul 1954

Media Count:

23 Page(s)

Report Number(s):

RAND-P-546-RC

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The paper questions the necessity of salt water conversion in order to increase the fresh water supply. It is pointed out that, in the U. S. as a whole, there is no water shortage and that other methods are less expensive than salt water conversion for supplying areas low in water.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604382

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METHODOLOGY FOR RELIABLE FAILURE REPORTING FROM MAINTENANCE PERSONNEL,

Personal Author(s):

HADDEN,F A

Sepmeyer, L W

Report Date:

15 Jul 1954

Media Count:

9 Page(s)

Report Number(s):

P-545

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The work described in this paper is based upon experience gained at a United States Air Force installation, but it is clear that many of the concepts which emanate from the consideration of the human factors involved are applicable to getting failure data in industrial and other organizations. Consideration of field conditions forces one to the conclusion that the maintenance technician is the only practical source of the required failure or malfunction data, except for very special projects where it may be practical to have a large number of people assigned specifically to the job of taking data. The basic problem is how to make the maintenance man a reliable link in the failure reporting process. The lessons learned from this field trial are not black or white rules that must be rigorously adhered to, but rather a set of four basic principles, each of which contributes to a successful reporting system. The four principles are (1) consideration of human factors, (2) payment for the data in a tangible way, (3) delegation of responsibility for reporting to the lowest possible organizational level, (4) design of the reporting form for the maintenance man. Each of these principles are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604381

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ASYMPTOTIC SOLUTIONS FOR A CLASS OF INTEGRAL EQUATIONS,

Personal Author(s):

Latter, Richard

Report Date:

09 Jul 1954
Media Count:
20 Page(s)
Report Number(s):
P-544
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604317
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) SOLUTION OF A LARGE SCALE TRAVELING SALESMAN PROBLEM,
Personal Author(s):
Dantzig, G
Fulkerson, R
Johnson, S
Report Date:
08 Jul 1954
Media Count:
35 Page(s)
Report Number(s):
P-510
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE
Distribution Statement:
Availability: Microfiche only after original copies are exhausted.
Abstract:
(U) It is shown that a certain tour of 49 cities, one in each of the 48 states and Washington, D. C., has the shortest road distance. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293682

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) USE OF GAMES IN ECONOMIC ANALYSIS

Personal Author(s):

THOMPSON,FREDERICK B

Report Date:

17 Jun 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A new econometric model structure is discussed. The two goals underlying its development are: (1) to find a structure which could handle situations involving the results of interaction of large numbers of simple elements over time under a centralized control; (2) to find a structure which is reasonably computable so that various control policies could be tested and compared. The presentation of the structure is divided into three parts: first, its motivation from the point of view of the operations analyst, of the economist and of the mathematicians; second, a brief description of it, and third; a discussion of two examples: a model of a complete economy, AND A MODEL OF AN INDUSTRIAL ESTABLISHMENT.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0422829
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/422829.pdf
Size: 860 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD422829>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) SYSTEMS ENGINEERING
Personal Author(s):
Boldyreff, Alexander W
Report Date:
16 Jun 1954
Media Count:
16 Page(s)
Report Number(s):
RAND-P-537
XD-DOD
Monitor Series:
DOD
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604378
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) RELATIONSHIP BETWEEN THE MASSES AND MAGNITUDES OF SMALL METEORIDS,

Personal Author(s):

Kallmann,H K

Report Date:

08 Jun 1954

Media Count:

35 Page(s)

Report Number(s):

P-532

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An estimate of the probable masses of meteors of different brightness and velocities was made. Only meteors of relatively small sizes, ranging from about 1 to 0.0001 centimeters in radius were considered. An approximate distinction has been made between meteors of magnitudes larger than plus one and smaller than minus one, in order to account for the various sources of visible radiation predominant for different magnitude or brightness ranges. The time interval over which a meteor of a certain magnitude is visible to an observer was included in the mass calculations. Mass calculations were made for three major showers: the Geminids, the Perseids, and the Leonids; the corresponding average velocities with which particles belonging to these showers enter the earth's atmosphere are about 35 km/sec, 61 km/sec and 71 km/sec respectively. The results show that the determination of meteor masses from the luminosity-magnitude relation is dependent to some degree on the luminous efficiency and on the duration or visible path length.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604377

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USE OF MULTI-STAGE SAMPLING SCHEMES IN MONTE CARLO COMPUTATIONS,

Personal Author(s):

Marshall,Andrew W

Report Date:

03 Jun 1954

Media Count:

21 Page(s)

Report Number(s):

P-531

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The details of one of the available techniques of Monte Carlo computations, importance sampling, that can make Monte Carlo computations much more efficient if it were possible to choose judiciously the probability distribution from which the sample observations are drawn are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604326

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLITICAL VIEWS OF THE GERMAN CIVIL SERVICE,

Personal Author(s):

HERZ,John H

Report Date:

02 Jun 1954

Media Count:

125 Page(s)

Report Number(s):

P-528-RC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0354295

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/354295.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD354295>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) HEIGHT OF BURST FOR ATOMIC BOMBS (AFTER UPSHOTKNOTHOLE)

Personal Author(s):

Brode, Harold L

Report Date:

01 Jun 1954

Media Count:

44 Page(s)

Report Number(s):

RM1107

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604642

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CREEP BUCKLING: AN ENGINEERING SURVEY,

Personal Author(s):

SHANLEY,F R

Report Date:

Jun 1954

Media Count:

60 Page(s)

Report Number(s):

P-641

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The present status of creep-buckling theory is reviewed in the light of the development of column theory, including the elastic theory for straight columns (Euler), inelastic column theory (Engesser-Karman-Shanley), and eccentric columns (Karman, etc.). It is shown that the existence of a critical time requires a nonlinear (increasing) relationship between the creep strain rate and the stress. The isotangent-modulus method is described and applied to various types of buckling and design problems. Mathematical theories of creep-buckling are discussed in a general way. Suggestions for future analytical and experimental work on this phenomenon are included. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604290

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECT OF RELIABILITY OF 'SUPERVISORY' EQUIPMENT ON THE ACCURACY OF A 'SUPERVISED' SYSTEM,

Personal Author(s):

Boldyreff,Alexander W

Report Date:

28 May 1954

Media Count:

8 Page(s)

Report Number(s):

P-466

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The study deals with a basic system, the performance of which degenerates through random errors increasing with the square root of operating time. The probable circular error of this system can be made independent of the time by the addition to the system of supervisory equipment capable of periodic correction of the errors of the basic system. Assuming the supervisory equipment 'fail safe' and subject to constant hazard type of failure the performance of the supervised system is determined for various values of reliability of the supervisory equipment. It is shown that a great improvement in performance is possible even with unreliable supervision. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604384

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NATURE AND APPLICATIONS OF PROCESS ANALYSIS,

Personal Author(s):

MARKOWITZ,H M

Report Date:

24 May 1954

Media Count:

53 Page(s)

Report Number(s):

P-547

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The ultimate goal of the process analysis project is to produce a model of the technological capabilities of the economy as a whole. The purpose of the model is to predict what combinations of civilian and military outputs can and cannot be produced with specified national resources.

Characteristic of the process analysis approach is the use of detailed engineering data, modern computing techniques and high speed computing machines.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604376

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OBSERVATIONS ON THE GROWTH OF INFORMATIONPROCESSING CENTERS,

Personal Author(s):

WEINER,Milton G

Report Date:

21 May 1954

Media Count:

32 Page(s)

Report Number(s):

P-529

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A set of observations on the process by which a group of individuals can become an effective organization is presented. Sections of the paper are concerned with a model of organizational development, mechanisms employed by organizations to deal with complex task situations, and mechanisms available to experimenters and managers to control and stimulate the development of an organization. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604322

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604322.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604322>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) U. S. REACTION TO NORTH KOREAN AGGRESSION

Personal Author(s):

George, Alexander L

Report Date:

17 May 1954

Media Count:

46 Page(s)

Report Number(s):

RAND-P-522

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) An attempt is made to reconstruct from contemporary newspaper accounts and the MacArthur hearings the way in which U. S. policy-makers perceived and interpreted the North Korean aggression. An attempt is also made to show that the U. S. reaction to the aggression was influenced by uncertainty as to broader Soviet intentions.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293679

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME APPLICATIONS OF THE THEORY OF DYNAMIC PROGRAMMING - A REVIEW

Personal Author(s):

BELLMAN,RICHARD

Report Date:

14 May 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An expository account of the theory of dynamic programming is provided. Two problems of rather simple form are considered: (1) (Optimal Allocation). We are given a resource, x , to divide into two parts, y and $x-y$. From y we obtain a return of $g(y)$; from $x-y$ a return of $h(x-y)$. In so doing, we expend a certain amount of the original quantity and are left with a new quantity, $ay + b(x-y)$, where $0 \leq a, b \leq 1$. This process is now continued. The problem is to allocate at each stage so as to maximize the total return obtained over a finite or unbounded number of stages. (2) (Efficient Gold Mining). We are fortunate enough to possess two gold mines, Anaconda and Bonanza, the first of which contains an amount x of gold, while the second possesses an amount y . In addition, we have a rather delicate gold-mining machine which has the property that if used to mine gold in Anaconda, there is a probability p_1 that it will mine a fraction r_1 of the gold there and remain in working order, and a probability $(1-p_1)$ that it will mine no gold and be damaged beyond repair. Similarly, Bonanza has associated the probabilities p_2 and $(1-p_2)$ and the fraction r_2 . (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293671

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NON-MILITARY APPLICATIONS OF OPERATIONS RESEARCH

Personal Author(s):

KENT,A I

Report Date:

14 May 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422827

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHICH PROGRAM DO WE MEAN IN, PROGRAM BUDGETING.

Personal Author(s):

Novick,David

Report Date:

12 May 1954

Media Count:

22 Page(s)

Report Number(s):

P530

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0114141

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NOTES ON LINEAR PROGRAMMING: PART XII. A COMPOSITE SIMPLEX ALGORITHM, II

Personal Author(s):

ORCHARD-HAYS, WILLIAM

Report Date:

07 May 1954

Media Count:

14 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604323

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REVIEW OF FOURIER ANALYSIS AND AUTOCORRELATION,

Personal Author(s):

Larmore,Lewis

Report Date:

06 May 1954

Media Count:

31 Page(s)

Report Number(s):

P-523

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A review of Fourier analysis and autocorrelation applications in the problems of physics and engineering is presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0085428

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE AGRICULTURAL LABOR FORCE AND POPULATION OF THE USSR: 1926-41

Descriptive Note:

Research memo.,

Personal Author(s):

EASON, WARREN

Report Date:

04 May 1954

Media Count:

210 Page(s)

Report Number(s):

RM-1248

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604313

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PETROLEUM REFINERY OPERATIONS SCHEDULING. CHAP. VII. THE ECONOMIST AND THE OPERATIONS SCHEDULER,

Personal Author(s):

Manne,A S

Report Date:

01 May 1954

Media Count:

5 Page(s)

Report Number(s):

P-503

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In applying mathematical economics to the operation of business activities, the following questions are briefly examined: What is the econometrician currently able and unable to contribute to the refinery programming problem, and, what can the economist learn about the refinery operator.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604309

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PETROLEUM REFINERY OPERATIONS SCHEDULING. CHAP. VI. CRACKING, RECYCLING, AND BLENDING
AN INTEGRATED REFINERY PROBLEM,

Personal Author(s):

Manne,A S

Report Date:

01 May 1954

Media Count:

1 Page(s)

Report Number(s):

P-493

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper is concerned with a simplified version of a hypothetical representative thermal cracking refinery scheduling problem. It was possible to convert into the language of linear programming an engineering analysis that had originally involved numerous non-linearities. The mathematical analysis does not eliminate the fundamental uncertainties facing an oil company but the scheduling calculations do enable the refinery people to present the executive group with a detailed program for dealing with each of several possible contingencies.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604302

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PETROLEUM REFINERY OPERATIONS SCHEDULING. CHAPTER V. A GASOLINE BLENDING PROBLEM,

Personal Author(s):

Manne,Alan S

Report Date:

01 May 1954

Media Count:

66 Page(s)

Report Number(s):

P-487

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The selection of an optimal gasoline blending schedule is presented. Assuming fixed availabilities of raw blending materials and of fixed realizations upon finished products, the Union Oil Company's gasoline blending operations were formulated in terms of a constrained maximum problem. The outstanding result of the numerical analysis was that it would be worth several millions of dollars per annum if the company were able to shift sales so as to sell additional quantities of premium grade gasoline.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604298

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PETROLEUM REFINERY OPERATIONS SCHEDULING. CHAPTER II. CONVENTIONAL METHODS OF REFINERY ECONOMIC ANALYSIS,

Personal Author(s):

MANNE,A S

Report Date:

01 May 1954

Media Count:

15 Page(s)

Report Number(s):

P-481

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Economic analysis and costing principles in refinery operations are discussed. The limitations and drawbacks are examined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604304

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PETROLEUM REFINERY OPERATIONS SCHEDULING. CHAPTER IV. A NAPHTHA REFORMING PROBLEM,

Personal Author(s):

MANNE,Alan S

Report Date:

01 May 1954

Media Count:

47 Page(s)

Report Number(s):

P-489

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper offers a case study in the mathematical methods currently being employed by refinery economics managers. When the analysis is confined to small sections of an integrated operation, the present nomogram techniques appear to be quite adequate. The only disadvantage in relying upon such methods is that they cannot be extended to problems that involve many independent variables.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604301

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PETROLEUM REFINERY OPERATIONS SCHEDULING. CHAPTER III. A CRUDE OIL ALLOCATION PROBLEM,

Personal Author(s):

Manne,Alan S

Report Date:

01 May 1954

Media Count:

36 Page(s)

Report Number(s):

P-484

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents a simplified analysis of the allocation of crude oils between the various units of multiplant integrated concern. The mathematical technique used takes notice of the net realization estimates that are available in large integrated companies and also handles the question of crude oil availabilities and of primary distillation capacities.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604320

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPENSATION FOR WAR DAMAGE: AN ECONOMIC VIEW,

Personal Author(s):

Hirshleifer,Jack

Report Date:

29 Apr 1954

Media Count:

27 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The object of the paper is to point out that a properlyconceived insurance plan will yield an important social gain by tending to encourage private actions in peacetime having the effect of reducing our national vulnerability to bombing; conversely, a poorly-conceived plan will tend to discourage expenditures designed to reduce vulnerability.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604319

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOLUME 14,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

22 Apr 1954

Media Count:

6 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of chi-square integrals are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604234

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE DISTRIBUTION OF CERTAIN FUNCTIONALS OF MARKOFF PROCESSES,

Personal Author(s):

Darling,D A

Siegert,A J F

Report Date:

20 Apr 1954

Media Count:

28 Page(s)

Report Number(s):

P-429

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem of the distribution of certain functionals of a general n-dimensional Markoff process $X(t)$ is explored. Analytical methods for the study of random variables are developed. A fundamental pair of integral equations whose unique solution is the characteristic function of $U(s, t)$ is also developed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0085427

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DETECTION RANGE OF AN ACTIVE RADAR SEEKER

Personal Author(s):

MALLETT, J D

SWERLING, P

Report Date:

20 Apr 1954

Media Count:

32 Page(s)

Report Number(s):

RM-1238

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604315

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE METAMORPHOSIS OF THE STALIN MYTH,

Personal Author(s):

Tucker,Robert C

Report Date:

16 Apr 1954

Media Count:

40 Page(s)

Report Number(s):

P-507

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion is presented concerning developments in Russia following the death of Stalin. Official Soviet propaganda made an initial attempt to restore Stalin's memory to favor, depicting him as a devoted follower of Lenin, a lifelong exponent of collective leadership, and a humble servant of the will of the Party. The disproportionately heavy stress upon Stalin as a war leader, however, probably reflected the desire of the Kremlin leadership to reassert the principle of Party-political supremacy over the armed forces in the face of claims apparently emanating from professional military circles for an autonomous status within the Soviet system.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604774

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE BRUSH-OFF IS CALLED 'NEW LOOK',

Personal Author(s):

Mehnert,Klaus

Report Date:

13 Apr 1954

Media Count:

6 Page(s)

Report Number(s):

T-32

TT-64 71268

Monitor Series:

64 71268

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Translation of a West German editorial on the atomic bomb strategy of U. S. national defense.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604316

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPLICATIONS OF A CATHODE RAY TUBE READOUT DEVICE FOR THE IBM 701 ELECTRONIC DATA PROCESSING MACHINE,

Personal Author(s):

Armer,Paul

Report Date:

08 Apr 1954

Media Count:

12 Page(s)

Report Number(s):

P-509

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A Cathode Ray Tube Readout Device for the 701 is described from the user's viewpoint. Its application to a particular problem is discussed. This problem involves a large amount of output and is unusual in that it is the inverse of the data reduction problem. More general uses are also touched upon. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604314

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE CONCERNING THE ORGANIZATION OF AN IBM TYPE 701 INSTALLATION,

Personal Author(s):

MADDEN,John D

Report Date:

07 Apr 1954

Media Count:

14 Page(s)

Report Number(s):

505

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A brief report on three projects in the RAND Numerical Analysis Department is presented. The first is a survey of the organizational setups used at various IBM Type 701 installations. The results give an insight into the philosophies influencing operation of each of eleven computing groups. The second is the development and validation of a test which will help to distinguish good prospects for computing jobs from bad ones. The last is the installation of a camera in the 701 room to expedite checking of machine programs. It is felt that the camera will allow divorcing the programmers from machine operation and that this will effect an increased efficiency in machine utilization. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0114134

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE GENERALIZED SIMPLEX METHOD FOR MINIMIZING A LINEAR FORM UNDER LINEAR INEQUALITY
RESTRAINTS

Personal Author(s):

DANTZIG, GEORGE B

ORDEN, ALEX

WOLFE, PHILIP

Report Date:

05 Apr 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604310

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON THE RELATIVISTIC THOMAS-FERMI ATOM MODEL,

Personal Author(s):

Gilvarry,J J

Report Date:

01 Apr 1954

Media Count:

5 Page(s)

Report Number(s):

P-500

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that an expression for the density of states derived from the Dirac wave equation for a central field removes the convergence difficulties in the usual relativistic Thomas-Fermi equation.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0085423

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) STATISTICAL THEORY OF NAVIGATION EMPLOYING INDEPENDENT INERTIAL AND VELOCITY MEASUREMENTS

Personal Author(s):

SWERLING, P

REICH, E

Report Date:

25 Mar 1954

Media Count:

52 Page(s)

Report Number(s):

RM-1220

Contract Number:

AF 33(038)-0413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604311

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GERMAN GEOPOLITICS REVIVED,

Personal Author(s):

Schnitzer,Ewald W

Report Date:

21 Mar 1954

Media Count:

23 Page(s)

Report Number(s):

P-501

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The history of German geopolitics is discussed in relation to its postwar manifestations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604312

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PETROLEUM REFINERY OPERATIONS SCHEDULING. CHAP. I. INTRODUCTION,

Personal Author(s):

Manne,Alan S

Report Date:

19 Mar 1954

Media Count:

9 Page(s)

Report Number(s):

P-502

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This report introduces the use of mathematical economics in representative oil refinery scheduling problems. A glossary of technical terms is presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0080638

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/080638.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD080638>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROBABILITY OF DETECTION FOR FLUCTUATING TARGETS

Descriptive Note:

Research memo.

Personal Author(s):

SWERLING, P

Report Date:

17 Mar 1954

Media Count:

46 Page(s)

Report Number(s):

PM-1217

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604299

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTATIONAL EXPERIENCE IN SOLVING LINEAR PROGRAMMING PROBLEMS,

Personal Author(s):

Orchard-Hays,Wm

Report Date:

15 Mar 1954

Media Count:

21 Page(s)

Report Number(s):

P-482

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Linear programming techniques for solving administrative and planning problems are discussed. The simplex method is advanced as the most practical way of solving the mathematical problem. The value of the IBM 701 calculator as a computational aid is explored. A petroleum blending problem is used to illustrate the power of linear programming as a tool for planning.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604306

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604306.pdf

Size: 947 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604306>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ATOMIC WEAPONS AND GROUND COMBAT: SEARCH FOR ORGANIZATION AND DOCTRINE

Personal Author(s):

DeWeerd, H A

Report Date:

12 Mar 1954

Media Count:

15 Page(s)

Report Number(s):

RAND/P-497

XD-DASA

Monitor Series:

DASA

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Ground combat preparations are discussed in terms of their effectiveness in atomic warfare.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604519

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) RED STAR SERIES ON ATOMIC ENERGY. PT. III. NUCLEAR REACTIONS,
Personal Author(s):
MKRTYCHEV,M
Report Date:
04 Mar 1954
Media Count:
10 Page(s)
Report Number(s):
T-35 PT. 3
TT-64 71247
Monitor Series:
64 71247
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0340556
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/340556.pdf
Size: 9 MB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD340556>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) PROJECT FEED BACK
Descriptive Note:
Summary rept.
Personal Author(s):
Lipp, J E
Salter, R M
Report Date:
01 Mar 1954

Media Count:

191 Page(s)

Report Number(s):

R-262-VOL-1

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Abstract:

(U) An analysis of the potential of an unconventional reconnaissance method is presented here-a method whereby inaccessible points on the earth may be viewed by television from a satellite orbiting at 300-mi altitude. The current code name for this project is "Feed Back." Primarily, emphasis in the report is on reconnaissance utility, and results of interpretation of simulated satellite photographs are included. Secondly, a typical example of hardware needed to accomplish such a task is shown with the hope that this will serve as a guide to future investigators. It is estimated that such an accomplishment will not require radically new technology or enormous cost.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604307

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A METHOD FOR DETERMINING THE EFFECTS OF ELEVATED TEMPERATURE ON STRUCTURAL DESIGN AND WEIGHT,

Personal Author(s):

MICKS,W R

Report Date:

Mar 1954

Media Count:

74 Page(s)

Report Number(s):

P-498

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A method of including temperature and time effects in the determination of allowable stresses for structures that operate at elevated temperatures is presented. Creepbuckling and permanent structural deformation are considered, as well as the static, or short-time properties of the material at elevated temperature. Results are obtained in a form that can be used for preliminary design weight estimation. Recommendations are made regarding research needed to form a basis for structural design at elevated temperatures. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0340560

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/340560.pdf

Size: 5 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD340560>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROJECT FEED BACK

Descriptive Note:

Summary rept.

Personal Author(s):

Lipp, J E

Salter, R M

Report Date:

01 Mar 1954

Media Count:

126 Page(s)

Report Number(s):

R-262-VOL-2

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Contents: The vehicle; Vehicle design; Auxiliary powerplant; Television payload equipment, Environment problems, Flight mechanics, Attitude control, and operations; Launching considerations; Other satellite applications.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606030

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC ENERGY. PT. II. RADIOACTIVE DISINTEGRATION OF NUCLEI,

Personal Author(s):

Mikhailov,V

Report Date:

26 Feb 1954

Media Count:

8 Page(s)

Report Number(s):

T-35 pt. 2

TT-64 71431

Monitor Series:

64 71431

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion is presented on the discovery of radioactivity and its subsequent application to physics, chemistry, medicine, and technology. The effects of radiation on the human organism are also considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293677

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES ON BOTTLENECK PROBLEMS IN PRODUCTION PROCESSES

Personal Author(s):

BELLMAN,RICHARD

LEHMAN,R SHERMAN

Report Date:

25 Feb 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Two papers are given, their purpose being to study in detail some representative problems which occur in the study of interindustry processes. The general techniques will be those of the theory of dynamic programming. The first paper considers a simple mathematical model of the interaction of two independent industries engaged in the production of one item. For convenience, the auto and steel

industries are considered. The second paper treats the problem of maximizing $x_2(T)$ given the equations: $\frac{dx_2}{dt} = a_2 z_2(t) - z_3(t)$, $x_2(0) = c_2$, and $\frac{dx_3}{dt} = b_3 \gamma_3 z_3(t) - \gamma_2 a_2(t)$, $x_3(0) = c_3$, and the constraints: z_2, z_3 greater than or equal to 0, $z_2 + z_3$ less than or equal to x_2 , and $\gamma_2 z_2 + \gamma_3 z_3$ less than or equal to x_3 , where a_2, b_2, γ_2 , and γ_3 are positive constants.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604305

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE THEORY OF DYNAMIC PROGRAMMING AS APPLIED TO A SMOOTHING PROBLEM,

Personal Author(s):

Bellman,R

Glicksberg,I

Gross,O

Report Date:

16 Feb 1954

Media Count:

11 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A problem involved in adjusting production facilities to changes in demand is considered using the theory of dynamic programming.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604303

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) W. K. B. APPROXIMATION THROUGH THE TURNING POINT,

Personal Author(s):

BROYLES,A A

Report Date:

15 Feb 1954

Media Count:

11 Page(s)

Report Number(s):

P-488

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Approximations to solution of the radial one particle Schroedinger wave equation for hydrogen bound states were investigated and compared to the original Wentzel, Kramers, Brillouin (W. K. B.) approximation. A modification of the W. K. B. formulas to allow them to pass through turning points and an approximation involving simple harmonic oscillator wave functions were used. Normalization was accomplished by a means similar to the correspondence principle normalization of W. K. B. The accurate solutions may be reproduced to within 5 percent by these approximations. The simple harmonic oscillator functions seem to give the most satisfactory solutions for most cases. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605751

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCIENTIFIC USES FOR A SATELLITE VEHICLE,

Personal Author(s):

Carhart,R R

Report Date:

12 Feb 1954

Media Count:

1 Page(s)

Report Number(s):

RM-1194

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A small future satellite vehicle offers possibilities for major advances in cosmic rays, solar physics, terrestrial meteorology, and in the physics of the earth's upper atmosphere. A larger satellite used as an astronomical observatory would be a revolutionary new tool in astrophysics and cosmology and would contribute to our fundamental knowledge of the nature of the universe. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604229

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SUPPLY OF FEMALE LABOR IN WORLD WAR II,

Personal Author(s):

MARSHALL,A W

Hirshleifer,J

Report Date:

05 Feb 1954

Media Count:

37 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem of the report was to analyze the influence of various determinants on the female labor force in the World War II period, and in particular to discover whether the supply curve of (female) labor was backward-sloping, as some analysts had maintained. From the methodological point of view, the most interesting aspect of the study was the attempt to take explicit account of the auto-correlation of the error terms in a multiple regression model.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604308

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE CONVERGENCE OF A PROCEDURE OF DUFORT AND FRANKEL FOR THE NUMERICAL SOLUTION OF PARABOLIC PARTIAL DIFFERENTIAL EQUATIONS,

Personal Author(s):

Juncosa,M L

Report Date:

01 Feb 1954

Media Count:

18 Page(s)

Report Number(s):

P-499

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A proof of convergence of the solution of a partial difference equation to the solution of the classical 'problem of limits' for one-dimensional diffusion with zero boundary conditions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604300

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BOTTLENECK PROBLEMS, FUNCTIONAL EQUATIONS AND DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman, Richard

Report Date:

29 Jan 1954

Media Count:

24 Page(s)

Report Number(s):

P-483

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A 'bottleneck problem' in the sense that the level of economic activity will be determined by the resource in shortest supply is discussed. A typical problem of the bottleneck type involving the auto industry, the steel industry and the tool industry is presented. The problem is formulated mathematically employing a discrete approximation. After a short discussion of the difficulties of this approach, a continuous approximation is advanced. Finally, the functional equation approach is applied to the theory of dynamic programming.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604297

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MOTOR GASOLINE BLENDING PROBLEM,

Personal Author(s):

Manne,A S

Report Date:

25 Jan 1954

Media Count:

3 Page(s)

Report Number(s):

P-479

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A gasoline blending problem was selected to provide a case study in the application of mathematical economics to an actual industrial situation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606029

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC ENERGY. PT. I. STRUCTURE AND PROPERTIES OF THE NUCLEUS,

Personal Author(s):

Mikhailov,V

Report Date:

14 Jan 1954

Media Count:

8 Page(s)

Report Number(s):

T-35 PT. 1
TT-64 71430
Monitor Series:
64 71430
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604296
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) EQUILIBRIUM ANALYSIS: THE STABILITY THEORY OF POINCARÉ-LIAPOUNOFF AND EXTENSIONS,
Personal Author(s):
Bellman, Richard
Report Date:
13 Jan 1954
Media Count:
11 Page(s)
Report Number(s):
P-475
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper appears as an appendix to a chapter in a book by E. F. Beckenbach entitled, 'Mathematics for Engineers.' This appendix sketches briefly some of the most important aspects of a part of the general theory of differential equations, the stability theory of equilibrium states. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA800004

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Attrition and Target Damage Estimates,

Personal Author(s):

Attaway, L D

Brom, J R

Report Date:

05 Jan 1954

Media Count:

203 Page(s)

Report Number(s):

RAND/RM-1166

XD-XD

Contract Number:

AF 33(038)6413

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604145

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BAYES MODEL IN SEQUENTIAL DESIGN,

Personal Author(s):

Karlin ,Samuel

Johnson,S M

Report Date:

04 Jan 1954

Media Count:

30 Page(s)

Report Number(s):

P-328

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper is concerned with the Bayes problem of how to maximize the expected number of successes in N trials when at each trial we are free to choose between two machines I and II whose probabilities ρ of success are unknown but have a known a priori distribution $F(\rho)$.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607582

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC ENERGY. PART X. THE PHYSICS OF THE BEHAVIOR OF NUCLEAR FORCESRADIOACTIVE SUBSTANCES,

Personal Author(s):

Sedov,A

Report Date:

Jan 1954

Media Count:

10 Page(s)

Report Number(s):

T-35 pt. 10

TT-64 71613

Monitor Series:

64 71613

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607597

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC ENERGY. PART VIII. THE PHYSICS OF THE BEHAVIOR OF NUCLEAR FORCES: LIGHT RADIATION,

Personal Author(s):

Arkhipov,M

Report Date:

Jan 1954

Media Count:

10 Page(s)

Report Number(s):

T-35 PT. 8

TT-64 71623

Monitor Series:

64 71623

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This report consists of a popularized article on light radiation produced by nuclear explosions. The causes, properties, effects and associated phenomenon are discussed without technical details.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604768

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604768.pdf

Size: 395 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604768>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC WEAPONS AND ANTIATOMIC DEFENSE. PART 3. ATOMIC WEAPONS AND ANTIATOMIC DEFENSE

Personal Author(s):

Olisov, B

Krieger, F J

Report Date:

Jan 1954

Media Count:

12 Page(s)

Report Number(s):

T-41-PT-3

TT-64-71262

XA-BMD

Monitor Series:

BMD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited., Availability: Document partially illegible.

Abstract:

(U) The article discusses the damaging effects of light and radioactive particles in atomic attack.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604782

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC ENERGY. PT. IV. THE PHYSICS OF A NUCLEAR EXPLOSION,

Personal Author(s):

Arkhipov,M

Report Date:

Jan 1954

Media Count:

12 Page(s)

Report Number(s):

T-35

pt. 4

TT-64 71276

Monitor Series:

64 71276

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The physics involved in a nuclear explosion is explained. The chain reaction and release of energy in an atomic explosion are described.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607568

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC ENERGY. PART IX. THE PHYSICS OF THE BEHAVIOR OF NUCLEAR
FORCESPENETRATING RADIATION,

Personal Author(s):

Sedov,A

Report Date:

Jan 1954

Media Count:

12 Page(s)

Report Number(s):

T-35 pt. 9

TT-64 71619

Monitor Series:

64 71619

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604294

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WAR AND PEACE,

Personal Author(s):

Speier,Hans

Report Date:

29 Dec 1953

Media Count:

16 Page(s)

Report Number(s):

P-471

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604293

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON MATRIX THEORY--IV (AN INEQUALITY DUE TO BERGSTROM),

Personal Author(s):

Bellman, Richard

Report Date:

21 Dec 1953

Media Count:

5 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Two proofs are presented of an inequality due to Bergstrom. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604292

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IMPULSIVE LOADING ON AN ELASTIC HALF-PLANE,

Personal Author(s):

COLE,J D

Huth,J H

Report Date:

14 Dec 1953

Media Count:

7 Page(s)

Report Number(s):

P-467

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Consideration is given to the wave system resulting from a step loading on an elastic half-space. The stresses in a one dimensional 'head' are given exactly. The maximum width of this 'head' is $2r_0$, and its depth along the axis falls off like $1/z^2$ for large z . However the magnitude of the stresses within the 'head' remain constant. This one dimensional 'head' could be of considerable importance in spalling problems. Integrals representing reflected waves can be obtained and treated by the same method.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604165

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ATTITUDES TOWARDS THE USE OF FORCE,

Personal Author(s):

Brodie,Bernard

Report Date:

12 Dec 1953

Media Count:

1 Page(s)

Report Number(s):

P-360

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The use of force and its function the structure of society are discussed. Theories regarding warfare and armament in terms of political acumen and international relations are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604246

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ALLOCATION OF SWITCHING WORK IN A SYSTEM OF CLASSIFICATION YARDS,

Personal Author(s):

Bechmann,Martin

koopmans,Tjalling C

McGuire,C B

Winsten,C B

Report Date:

03 Dec 1953

Media Count:

12 Page(s)

Report Number(s):

P-448

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604287

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME ECONOMIC ASPECTS OF FISSIONABLE MATERIAL,

Personal Author(s):

Enke,Stephen

Report Date:

25 Nov 1953

Media Count:

24 Page(s)

Report Number(s):

P-462

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The determination of an optimum program for the production, allocation, and use of fissionable material involves a number of economic suboptimizations, once important political and military decision have been made. The economic optimization involves other suboptimizations in turn, one for the AEC, another for the DOD, and conceivably for individual Services and campaigns. Linear programming provides a means of handling a number of these small optimizations and the institution of shadow prices permits a decentralized method of solution. Despite the secrecy that surrounds it, fissionable material is preeminently an economic good, and economists with the necessary clearances should be capable of an important contribution to national defense. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604288

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON PERTURBATION METHODS INVOLVING EXPANSIONS IN TERMS OF A PARAMETER,

Personal Author(s):

Bellman, Richard

Report Date:

25 Nov 1953

Media Count:

11 Page(s)

Report Number(s):

P-463

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown by means of some examples from the theories of linear algebraic equations, linear integral equations, and nonlinear differential equations that the effectiveness of the method of expanding the solution in terms of a parameter may be greatly increased in many cases by expanding in terms of a suitably chosen function of the parameter. This is particularly true when the physical setting of the equation allows only positive values of the parameter to enter. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604285

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON SOME APPLICATIONS OF THE THEORY OF DYNAMIC PROGRAMMING TO LOGISTICS,

Personal Author(s):

Bellman, Richard

Report Date:

19 Nov 1953

Media Count:

24 Page(s)

Report Number(s):

P-457

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In recent years, the study of multi-stage processes has become of greater and greater importance in wider and wider fields. A multi-stage process means a process composed of a sequence of operations in which the outcome of the preceding operations may be used to guide the course of future operations. Two types of operations may be distinguished immediately, those in which the outcome is completely determined, and those in which the outcome is uncertain. To treat these problems in a systematic fashion the theory of dynamic programming has been developed. In the article, some simple, but non-trivial, problems of the kind that plague logisticians are considered in order to illustrate what kinds of problems are amenable to our techniques, what analytic results may be expected, and what computational procedures must be utilized in general. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604286

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GERMAN REARMAMENT AND THE OLD MILITARY ELITE,

Personal Author(s):

Speier, Hans

Report Date:

16 Nov 1953

Media Count:

28 Page(s)

Report Number(s):

P-458

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The American policy toward postwar Germany is examined. Rearmament of West Germany is discussed in terms of its political and military significance. The former German military elite are considered as representatives of Germany's military tradition and as persons potentially competent to discuss the military implications of the European Defense Community.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604284

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME COMBINATORIAL PROBLEMS ARISING IN THE THEORY OF MULTI-STAGE PROCESSES,

Personal Author(s):

Bellman,Richard

Gross,Oliver

Report Date:

13 Nov 1953

Media Count:

15 Page(s)

Report Number(s):

P-456

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Using the technique of continuous approximation, approximate solutions to a number of important multistage scheduling problems are determined. In addition, the functional equation approach of the theory of dynamic programming is used to derive an alternate proof. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604282

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND A NEW FORMALISM IN THE CALCULUS OF VARIATIONS,

Personal Author(s):

Bellman, Richard

Report Date:

12 Nov 1953

Media Count:

8 Page(s)

Report Number(s):

P-454

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper, shows that the functional equation technique introduced in previous works may be used to provide a new approach to some classical problems in the calculus of variations. In addition to furnishing a new analytic weapon, the method has great potentialities as a computational tool.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604245

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXPERIMENTS ON 'THE CORTICAL CORRELATE OF PATTERN VISION,'

Personal Author(s):

EMMONS, William H

Hennessey, Robert

kennedy, John L

Report Date:

03 Nov 1953

Media Count:

15 Page(s)

Report Number(s):

P-447

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Kohler-Held experiment on DC potential shifts related to visual stimulation was repeated, using two channels of DC recording. In a preliminary experiment, 11 subjects were given 638 exposures to a moving bar of light. Twentythree per cent of the trials were successful, i.e., a DC response from an occipital electrode referred to a vertex electrode was observed. When records of 8 of the 11 subjects were scored during nonstimulus periods, 31% successes were observed. It is concluded that the DC responses are not necessarily related to the occurrence of the visual stimulus. A second experiment was conducted on 10 subjects with two channels of DC recording. These results suggest that the source of the DC changes may be the corneo-retinal potential from eye movement or other areas of the brain rather than the occipital areas. It is concluded that the Kohler-Held phenomenon, although it may be recorded from all subjects, is statistically infrequent and the conditions under which it does appear are rather obscure. It is suggested that the name, 'The Cortical Correlate of Pattern Vision,' is premature.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604283

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME PROBLEMS IN THE THEORY OF DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman, Richard

Report Date:

02 Nov 1953

Media Count:

21 Page(s)

Report Number(s):

P-455

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theory of dynamic programming treats problems involving multi-stage processes by means of a transformation of the problem from the space of decisions to the space of functions. This is accomplished by deriving a functional equation whose solution is equivalent to the solution of the original problem. To illustrate this approach most clearly, free of extraneous analytic details, a simple but nontrivial multi-stage investment problem is considered. How exact solutions may be obtained in some cases, approximate solutions in others, and how these approximate solutions may be used to obtain more accurate solutions in the general case is shown. Of particular importance is the decrease in the number of independent variables made possible by this approach. This is not only important from the theoretical standpoint, but is also of great value in reducing the cost in time and effort of numerical computation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604228

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PASSAGE OF STATIONARY PROCESSES THROUGH LINEAR AND NON-LINEAR DEVICES,

Personal Author(s):

SIEGERT, A J F

Report Date:

29 Oct 1953

Media Count:

27 Page(s)

Report Number(s):

419

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem of finding the probability distribution of the noise output of a receiver consisting of a filter, a detector, and a second filter is discussed. Methods are discussed which have led to solutions of this problem in some special cases. In the case of multidimensionally Markoffian $x(t)$ the problem is shown to be equivalent to an integral equation, which in many cases of interest reduces to a differential equation. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604280

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REAL WAGES IN THE SOVIET UNION, 1928-52,

Personal Author(s):

Chapman,Janet G

Report Date:

17 Oct 1953

Media Count:

59 Page(s)

Report Number(s):

P-449

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper summarizes some preliminary findings of an investigation directed to the compilation on changes in the cost of living and in real wages in the Soviet Union for the years 1928, 1937, 1948, and 1952.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607188

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RESPONSE OF DRAG TYPE STRUCTURE TO BLAST,

Personal Author(s):

Gore,L A

O'Sullivan,J J

Report Date:

16 Oct 1953

Media Count:

133 Page(s)

Report Number(s):

RM-1151

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The blast damage from a nuclear explosion on structures is considered. Two types of shock waves are discussed; the static overpressure or pressure rise, and the dynamic or drag pressure. The physical vulnerability of the component plants of steel works is presented, including the susceptibility of various structural or equipment units.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604243

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS: VOLUME 13,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

09 Oct 1953

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of a definite integral, Cosine transformation, Bessel function, Mach number and a natural logarithm are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604242

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PRODUCT FORM FOR THE INVERSE IN THE SIMPLEX METHOD,

Personal Author(s):

DANTZIG,George B

Orchard-Hays,William

Report Date:

09 Oct 1953

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) When a matrix is represented as a product of 'elementary' matrices, the matrix, its transpose, its inverse and inverse transpose are readily available for vector multiplication. By an 'elementary matrix' is meant one formed from the identity matrix by replacing one column; thus an elementary matrix can be compactly recorded by the subscript of the altered column and the values of the elements in it. In the revised simplex method both the inverse and inverse transpose of a 'basic' matrix are needed; more significant, however, is the fact that each iteration replaces one of the columns of the basis. In the product form of representation, this change can be conveniently effected by multiplying the previous matrix by an elementary matrix; thus, only one additional column of information need be recorded with each iteration. This approach places relatively greater emphasis on 'reading' operations than 'writing' and thereby reduces computation time. Using the I.B.M. Card Programmed Calculator, a novel feature results: when the inverse matrix is needed at one stage and its transpose at another, this is achieved simply by turning over the deck of cards representing the inverse. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604241

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON THE NUMERICAL TREATMENT OF SECONDORDER DIFFERENTIAL EQUATIONS,

Personal Author(s):

Latter,Richard

Kahn,Herman

Report Date:

07 Oct 1953

Media Count:

5 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The method is based on converting the differential equation into an integral equation, which is effected by a double integration. Examples of this method are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422826

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DETERMINATION OF TRAFFIC IN A ROAD NETWORK-AN ECONOMIC APPROACH,

Personal Author(s):

Beckmann,Martin

McGuire,C B

Report Date:

06 Oct 1953

Media Count:

20 Page(s)

Report Number(s):

P437

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The practical purpose of an equilibrium model is prediction. But the purpose of prediction must be seen with reference to the ultimate end of traffic evaluation: the determination of the economically justified needs for road construction. The problem, what the highway network ought to be in order that it be of maximal benefit to the public, is a long-run economic problem of a high order of complexity. To put it differently, the balancing of cost for new construction and maintenance of roads against the time costs engendered through congestion and diversion, involves still other economic considerations into

which we cannot go here. These concern, for instance, the structure of road construction cost, and an explicit rendering of the effects on total congestion cost in a network, of an increase in some road capacity. But a solution of the latter problem implies knowledge of the way in which a given network is utilized by traffic, a question that this paper has tried to throw some light upon. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604240

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE VULNERABILITY OF THE UNITED STATES TO ENEMY ATTACK: ELEMENTS OF AN UNCLASSIFIED RESEARCH PROGRAM IN THE SOCIAL SCIENCES,

Personal Author(s):

Kaysen,Carl

Report Date:

04 Oct 1953

Media Count:

24 Page(s)

Report Number(s):

P-438

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is concerned chiefly with attacks from the air using nuclear weapons--A and H bombs. Two questions are discussed: (1) What methods are available for estimating the effects of attacks--in economic, political, and broad social terms. (2) What measures can be taken to reduce these effects, and at what costs.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604239

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE CONTINUOUS GOLD-MINING EQUATION,

Personal Author(s):

Bellman,Richard

Lehman,Sherman

Report Date:

01 Oct 1953

Media Count:

9 Page(s)

Report Number(s):

P-436

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604213

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE STABILITY OF FLUID FLOWS WITH SPHERICAL SYMMETRY,

Personal Author(s):

Plesset,M S

Report Date:

28 Sep 1953

Media Count:

10 Page(s)

Report Number(s):

P-395

Contract Number:

W7405eng48

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The conditions for the stability or instability of the interface between two immiscible incompressible fluids in radial motion are deduced. The stability conditions derived by Taylor for the interface of two fluids in plane motion do not apply to spherical flows without significant modifications. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604237

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTERS UNLIMITED: DIGITAL MACHINES IN TOMORROW'S BUSINESS WORLD,

Personal Author(s):

HARE, Willis H

Report Date:

21 Sep 1953

Media Count:

21 Page(s)

Report Number(s):

P-434

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Scientific computing, data handling and control--these applications of digital computers are discussed.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604236

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A FUNCTIONAL EQUATION IN THE THEORY OF DYNAMIC PROGRAMMING AND ITS
GENERALIZATIONS,

Personal Author(s):

Bellman, Richard

Lehman, Sherman

Report Date:

09 Sep 1953

Media Count:

73 Page(s)

Report Number(s):

P-433

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Various analytic properties of a particular functional equation are studied together with a number of generalizations of discrete and continuous type.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604235

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOCIOLOGICAL ASPECTS OF THE INFORMATION PROCESS,

Personal Author(s):

Kecskemeti,Paul

Report Date:

08 Sep 1953

Media Count:

35 Page(s)

Report Number(s):

P-430

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The thesis of the paper is that the distinction between evidential and non-evidential grounds for adopting beliefs is crucial to the study of the sociology of knowledge.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604233

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOL. 12,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

18 Aug 1953

Media Count:

6 Page(s)

Report Number(s):

P-426

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of a Bessel function, mach number, integral, and a Cosine transformation are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604232

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPROXIMATIONS IN NUMERICAL ANALYSIS: A REPORT ON A STUDY,

Personal Author(s):

Hastings,Cecil ,Jr

hayward,David K

Wong,James P ,Jr

Report Date:

13 Aug 1953

Media Count:

10 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is concerned with the problem of choice of parametric form, and determining the coefficients in the parametric form.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604231

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTATIONAL PROBLEMS IN THE THEORY OF DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman,Richard

Report Date:

06 Aug 1953

Media Count:

27 Page(s)

Report Number(s):

P-423

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A number of representative approximation techniques in the theory of dynamic programming are illustrated in a discussion of a functional equation.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604230

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PURGES IN THE SOVIET UNION AND IN THE SATELLITES,

Personal Author(s):
DINERSTEIN,Herbert S

Report Date:

03 Aug 1953

Media Count:

20 Page(s)

Report Number(s):

P-421

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The different kinds of purge employed in the Soviet Union to meet various political necessities are examined. Since the present Soviet leadership, with its parochial education, is intimately familiar only with the history of the Soviet Union since 1917, it quite naturally applies Soviet political methods to its management of the satellite countries. Thus an examination of the Soviet system of rule by purge will afford some understanding of events in the satellite countries and also some basis for prognostication.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604775

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RUSSIAN TACTICS,

Report Date:

24 Jul 1953

Media Count:

24 Page(s)

Report Number(s):

TT-64 71269

Monitor Series:

64 71269

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Reports of Russian military tactics against Germany in 1942 are presented. The discussion is focused on the breakthrough problems involved in attack.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604227

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET IMAGE OF THE U. S.,

Personal Author(s):

RUGGLES,Melville J

Report Date:

09 Jul 1953

Media Count:

13 Page(s)

Report Number(s):

P-418

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Russian view of the U. S. is pointed out. Some factors affecting national images generally, and their particular force upon Russians when they turn to look at America are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604152

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON MAXIMIZING AN INTEGRAL WITH A SIDE CONDITION,

Personal Author(s):

Emerson,R C

Report Date:

Jul 1953

Media Count:

8 Page(s)

Report Number(s):

P-338

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem to be discussed is that of finding an admissible function, $p(x)$, which makes an integral an absolute maximum subject to a side condition.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604223

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOL. 11,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

01 Jul 1953

Media Count:

6 Page(s)

Report Number(s):

P-415

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of Bessel functions and of mach numbers in terms of pressure ratio are given.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604216

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE INCOMPLETE APPROXIMATOR (IN SIX FITS),

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

12 Jun 1953

Media Count:

21 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A graphical treatment of curve fitting techniques is presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604222

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLE DERIVATION OF THE POISSON DISTRIBUTION,

Personal Author(s):

Kalaba,R E

Report Date:

11 Jun 1953

Media Count:

3 Page(s)

Report Number(s):

P-414

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) One of the most important stochastic processes is the Poisson process, in which it is assumed that (a) the numbers of events occurring in nonoverlapping time intervals are independent; (b) the probability of one event's occurring during time dt is $\lambda dt + o(dt)$, where λ is a constant, while the probability that two or more occur is $o(dt)$. Using only the simplest kind of reasoning from probability theory, the Poisson distribution is deduced from the basic assumptions (a) and (b). Consequently, the need for viewing the Poisson distribution as a limiting case of some other distribution is obviated. In addition the technique used readily generalizes to the case in which λ depends on t .

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604221

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INEQUALITIES,

Personal Author(s):

Bellman, Richard

Report Date:

08 Jun 1953

Media Count:

11 Page(s)

Report Number(s):

P-412

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A speech prepared for delivery before a Teachers' Conference at UCLA, 8 July 1953, containing an elementary presentation of some fundamental inequalities. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604295

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A NEW ITERATIVE ALGORITHM FOR FINDING THE SOLUTIONS OF GAMES AND LINEAR PROGRAMMING PROBLEMS,

Personal Author(s):

Bellman, Richard

Report Date:

01 Jun 1953

Media Count:

20 Page(s)

Report Number(s):

P-473

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The aim is to obtain a procedure which converges more rapidly than either the statistical method of Brown, or the differential equation approach of Brown and von Neumann. A variant of the differential equation approach which converges more rapidly than the original is presented. Carrying this approach to its logical limit a process with an exponential rate of convergence is obtained. The discrete analogue, obtained by replacing the differential equation by a difference equation, furnishes the new iterative algorithm.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0074903

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN INTRODUCTION TO THE THEORY OF DYNAMIC PROGRAMMING

Personal Author(s):

BELLMAN, RICHARD

Report Date:

Jun 1953

Media Count:

99 Page(s)

Report Number(s):

R-245

Contract Number:

W33-038-ac-14150

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604219

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BOTTLENECK PROBLEMS AND DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman, Richard

Report Date:

22 May 1953

Media Count:

9 Page(s)

Report Number(s):

P-407

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to indicate how the theory of dynamic programming provides a mathematical formulation and a systematic approach to an interesting and significant class of production and allocation problems.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604217

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE CLASS OF GAMES OVER FUNCTION SPACE AND RELATED VARIATIONAL PROBLEMS,

Personal Author(s):

Fleming,W H

Report Date:

20 May 1953

Media Count:

37 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A certain class of two person zero sum games in which the players have functions as pure strategies is considered. A notion of mixed strategy is defined for such games, and a theorem is proved insuring the existence of solutions in mixed strategies. By specializing to consider games in which one player has a passive role, some apparently new information on the existence of solutions to certain variational problems is obtained. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604220

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STALIN AS AN INTELLECTUAL,

Personal Author(s):

Leites,Nathan

Report Date:

18 May 1953

Media Count:

32 Page(s)

Report Number(s):

P408

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Stalin's theoretical writings are examined for the purpose of clarifying his accomplishments as an intellectual, and to demonstrate their relevance to any Bolshevik and Soviet patterns of thought. Soviet writing, encouraged by Stalin, long presented him as a master theoretician, without living peer in any field. The noticeable tendency more recently, by his successors, to reduce reference to this (and other) roles of Stalin does not, nevertheless, seek to deny the earlier theme.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604215

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECTS OF SURFACE TENSION AND VISCOSITY ON TAYLOR INSTABILITY,

Personal Author(s):

Bellman,Richard

Pennington,Ralph H

Report Date:

15 May 1953

Media Count:

28 Page(s)

Report Number(s):

P-403

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The model used is that of two fluids of infinite depth, with the interface initially in the form of a sine wave with amplitude small compared to wave length. The fluids are considered incompressible, and only

the linear terms in the equations of hydrodynamics are used. The first four sections discuss the effects of surface tension and viscosity. The fifth gives a few numerical results to illustrate the main points of the preceding sections. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604321

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WAR DAMAGE INSURANCE,

Personal Author(s):

Hirshleifer,Jack

Report Date:

May 1953

Media Count:

22 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper presents the contention that at least a partial way out of the present impasse on the question of passive defense would be to offer war damage insurance to protect property-owners from the chance distribution of losses due to enemy action. It is shown that an appropriate method of insuring property against war damage can be expected, over a period of years, to encourage purely private actions which will, aside from any governmental measures, tend to reduce the physical and economic vulnerability of our cities and industry to enemy bombing.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422823

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A THEORY OF FATIGUE BASED ON UNBONDING DURING REVERSED SLIP: SUPPLEMENT,

Personal Author(s):

Shanley,F R

Report Date:

01 May 1953

Media Count:

25 Page(s)

Report Number(s):

P350 suppl.

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This Supplement to P-350 is intended to serve as an interim report in which some of the more important recent developments in the theory of fatigue are discussed, particularly those which resulted from the distribution of a limited number of advance copies of the original paper. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604206

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON SOME VARIATIONAL PROBLEMS OCCURRING IN THE THEORY OF DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman,Richard

Glicksberg,Irving

Gross,Oliver

Report Date:

01 May 1953

Media Count:

51 Page(s)

Report Number(s):

P-380

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents some results of an investigation of a class of interesting and important variational problems involving the control of a physical system over a time interval. One large category of problems of this nature arises in connection with the maintenance of a dynamic system in or near a specified state at minimum cost. Another large category of problems, of economic and industrial origin, are those in which it is required to maximize the output of a system given a limited quantity of resources. Only one representative of this category will be discussed in this paper.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605674

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPLEXITY AND RELIABILITY IN ELECTRONIC EQUIPMENT,

Personal Author(s):

CARHART,R R

Report Date:

30 Apr 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Complexity as the source of unreliability in electronic equipment is discussed. The relationship between complexity and simplification is established and the need for radical advances in electronic reliability to reduce failures is stressed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604208

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONCAVE PROGRAMMING FOR GASOLINE BLENDS,

Personal Author(s):

Manne,A S

Report Date:

23 Apr 1953

Media Count:

44 Page(s)

Report Number(s):

P-383

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper presents a model of the economics of motor gasoline blending -- a maximizing problem subject to certain restraints.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604211

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUB-OPTIMIZATION CRITERIA AND OPERATIONS RESEARCH,

Personal Author(s):

McKean,Roland N

Report Date:

22 Apr 1953

Media Count:

21 Page(s)

Report Number(s):

P-386

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The importance of criteria, identifying ends or utility functions, in operations research is discussed. Criteria selection is examined from the viewpoint of suboptimization. The process of choosing among a relatively narrow list of resource allocations by an administrative level other than the highest.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604214

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOL. 10,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

16 Apr 1953

Media Count:

6 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of Bessel functions of imaginary argument are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604212

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOL. 9,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

01 Apr 1953

Media Count:

6 Page(s)

Report Number(s):

P-387

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of Bessel functions of imaginary argument are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604207

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE STABILITY THEORY OF DIFFERENTIALDIFFERENCE EQUATIONS,

Personal Author(s):

Bellman,Richard

danskin,John M ,Jr

Report Date:

17 Mar 1953

Media Count:

29 Page(s)

Report Number(s):

P-381

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A survey of the stability theory of linear and nonlinear differential-difference equations is given with particular reference to the applications to the problems of automatic control in systems possessing time-lags. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604205

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DERIVATIVE TEST FOR FINITE SOLUTION OF GAMES,

Personal Author(s):

Glicksberg,I

Report Date:

12 Mar 1953

Media Count:

8 Page(s)

Report Number(s):

P-379

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Karlin (AD-603 995) introduced a class of payoff functions M , related to convex payoff functions, for which optimal strategies with at most a finite number of points of increase always exist. The purpose of this paper is to give a proof for all n of the theorem concerning these functions which Karlin proved for $n=5$.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604204

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE HISTORY AND DEVELOPMENT OF THE ELECTRONIC COMPUTER PROJECT AT THE INSTITUTE FOR ADVANCED STUDY,

Personal Author(s):

Ware,Willis H

Report Date:

10 Mar 1953

Media Count:

23 Page(s)

Report Number(s):

P-377

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604149

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ARITHMANCY, THEOMANCY AND THE SOVIET ECONOMY,

Personal Author(s):

Kaplan, Norman M

Report Date:

06 Mar 1953

Media Count:

45 Page(s)

Report Number(s):

P-332

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The article criticizes Naum Jasny's analysis of Soviet economics, which deals primarily with the Soviet price system.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604203

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOLUME 8,

Personal Author(s):

Hastings,Cecil ,Jr

wong,James P ,Jr

Report Date:

02 Mar 1953

Media Count:

6 Page(s)

Report Number(s):

P-376

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of Bessel functions of imaginary argument are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603986

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FIRST PASSAGE PROBLEM FOR A CONTINUOUS MARKOFF PROCESS,

Personal Author(s):

Darling,D A

Siegert,A J F

Report Date:

02 Mar 1953

Media Count:

32 Page(s)

Report Number(s):

238

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The solution to the first passage problem for a strongly continuous temporally homogeneous Markoff process $X(t)$ is given. If $T = T_{ab}(x)$ is a random variable giving the time of first passage of $X(t)$ from the region $a < X(t) < b$ when $X(0) = x$, simple methods of getting the distribution of T (at least in terms of a Laplace transform) are developed. From the distribution of T the distribution of the maximum of $X(t)$ and the range of $X(t)$ are deduced. These results yield, in an asymptotic form, solutions to certain statistical problems in sequential analysis, non-parametric theory of 'goodness of fit,' optional stopping, etc. which are treated as an illustration of the theory. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604166

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RAND'S DIGITAL COMPUTER EFFORT,

Personal Author(s):

GUNNING, William F

Report Date:

23 Feb 1953

Media Count:

8 Page(s)

Report Number(s):

P-363

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A report of research done on digital computers is presented. Deviations of engineering importance in the development of the computers are discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604636

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A STOCKPILING PROBLEM: MATHEMATICAL TREATMENT,

Personal Author(s):

Danskin,J M

Report Date:

23 Feb 1953

Media Count:

19 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604202

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PERMANENT SET-UPS FOR IBM CALCULATORS,

Personal Author(s):
Orchard-Hays, William

Report Date:
17 Feb 1953

Media Count:
20 Page(s)

Report Number(s):
P-374

Report Classification:
Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of the paper is to discuss the efficiency of different methods of computation wherein the elementary functions and others must be evaluated on the IBM Electronic Calculating Punch, models 604 and 605, and the IBM Card-Programmed Electronic Calculator, models I and II.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0603983

Corporate Author:
RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) A GAME OVER FUNCTION SPACE,

Personal Author(s):
Danskin, J M

Gillman, L

Report Date:
16 Feb 1953

Media Count:
19 Page(s)

Report Number(s):
P-235

Report Classification:
Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is concerned with a specific zero-sum twoperson game over function space, to which is found an explicit saddle-point solution.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604198

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BEHAVIORAL MODEL OF RATIONAL CHOICE,

Personal Author(s):

Simon,Herbert A

Report Date:

20 Jan 1953

Media Count:

17 Page(s)

Report Number(s):

P-365

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A model is proposed for the description of rational choice by organisms of limited computational ability. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA800005

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Transmission of Pulses Over Voice-Quality Telephone Lines,

Personal Author(s):

Bertram, S

Mallett, J D

Report Date:

19 Jan 1953

Media Count:

15 Page(s)

Report Number(s):

RAND/RM-1029

XD-XD

Contract Number:

AF 33(038)6413

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604167

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOLUME 7,

Personal Author(s):

Hasting,Cecil ,Jr

Wong,James P ,Jr

Report Date:

16 Jan 1953

Media Count:

6 Page(s)

Report Number(s):

P-364

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Analytical approximations of Bessel functions of imaginary argument are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604164

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONSTANT STRAIN WAVES IN STRINGS,

Personal Author(s):

COLE,J D

Dougherty,C B

Huth,J H

Report Date:

12 Jan 1953

Media Count:

12 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A non-linear theory is developed for constant-strain waves in elastic strings. The speed of longitudinal and transverse waves is related to the strain and tension. The results can be used to calculate tension due to impact and thus breaking loads. Some generalizations are suggested. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422878

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/422878.pdf

Size: 559 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD422878>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS VOLUME 6

Personal Author(s):

Hastings, Jr , Cecil

Wong, Jr, James P

Report Date:

31 Dec 1952

Media Count:

11 Page(s)

Report Number(s):

P-358

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604162

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SURVEY OF AUTOMATIC COMPUTERS ANALOG AND DIGITAL,

Personal Author(s):

GUNNING, W F

Report Date:

23 Dec 1952

Media Count:

47 Page(s)

Report Number(s):

P-356

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theory, design principles and fields of usefulness of the various forms of automatic controllers commonly used in the process industry, are discussed. Some of the computer techniques in the field of instrumentation and control engineering are described.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422824

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /U2/422824.pdf
Size: 330 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD422824>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) ANALYTICAL APPROXIMATIONS. VOLUME 5
Personal Author(s):
Hastings, Jr , Cecil
Wong, Jr, J P
Report Date:
22 Dec 1952
Media Count:
9 Page(s)
Report Number(s):
P-355
XC-AFRDC
Monitor Series:
AFRDC
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604160
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/604160.pdf
Size: 992 KB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604160>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:

(U) On Stochastic Learning Theory

Personal Author(s):

Flood, Merrill M

Report Date:

19 Dec 1952

Media Count:

25 Page(s)

Report Number(s):

P-353

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604077

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRANSPORTATION,

Personal Author(s):

BLACKMAN,James H

Report Date:

17 Dec 1952

Media Count:

54 Page(s)

Report Number(s):

P-288 REV.

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The volume of traffic (freight and passenger) in the USSR is second only to the United States, and the 1928-1952 percentage rates of growth are considerably in excess of U.S. tempos. Expressed in relative terms (that is, in tonkilometers expended per unit of output), the transport requirements of the USSR exceed those of all the principal powers of the world. The size of Soviet transportation is a reflection in part of the scale of productive activity. But it also stems from the physical dimensions of the country (some two and one-half times the area of the United States) and the uneven distribution of population and resources. The substantial rise in the relative volume of traffic which occurred under the Soviet regime is due in part to an increase in the average length of haul, which occurred as a result of the expansion of the economically useable territory. In addition, the widening of market relations meant that an increasing percentage of total output enters the transport system. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604078

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRENDS AND PROSPECTS OF THE SOVIET POPULATION AND LABOR FORCE,

Personal Author(s):

Eason, Warren W

Report Date:

17 Dec 1952

Media Count:

102 Page(s)

Report Number(s):

P-289 REV.

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper is a summary exposition of Soviet population and labor force development under the five-year plans, followed by an examination of the degree to which future development can be expected to adhere to, or depart from, past trends. The population trends are drawn in terms of the total number of persons, their distribution by age and sex, and the birth and death rates. The growth of the labor force, set against the growth of the population, is analyzed in terms of the distribution by economic sectors.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604163

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CLASSICAL TAX-SUBSIDY PROBLEM,

Personal Author(s):

Debreu, Gerard

Report Date:

15 Dec 1952

Media Count:

16 Page(s)

Report Number(s):

P-357

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604161

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONFLICTS WITH IMPRECISE PAYOFFS,

Personal Author(s):

WILLIAMS,J D

Report Date:

15 Dec 1952

Media Count:

15 Page(s)

Report Number(s):

P-354

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is a lecture on game theory delivered at the Symposium on Applications of Game Theory, sponsored by the American Mathematical Society.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0085471

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE COST OF UNRELIABILITY OF AIR FORCE AIRBORNE ELECTRONIC EQUIPMENT AS PRESENTED BY THE COST OF MAINTENANCE

Personal Author(s):

KIRKWOOD, R L

SEPMEYER, L W

Report Date:

03 Dec 1952

Media Count:

1 Page(s)

Report Number(s):

RM-1002

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604159

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RADIATIVE OPACITY OF STELLAR MATTER.

Descriptive Note:

Doctoral thesis,

Personal Author(s):

Zirin, Harold

Report Date:

Dec 1952

Media Count:

111 Page(s)

Report Number(s):

P-351

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Contents: the opacity problem (previous assaults on the barrier, outline of the calculation of opacity tables); wave functions (wave functions of free electrons, the computation of free electron wave functions, bound states); self-consistent fields (the fermi-dirac statistics, the self-consistent field, the exchange potential); the opacity (determination of absorption coefficients and the rosseland mean opacity, conclusions' astrophysical implications).

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0008200

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GAMMA-RAY TRANSMISSION THROUGH FINITE SLABS

Personal Author(s):

PEEBLES,G H

Report Date:

01 Dec 1952

Media Count:

185 Page(s)

Report Number(s):

R-240

Contract Number:

W33-038-ac-14105

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The quantity which is considered most important is the build-up factor for a monoenergetic, monoangular beam of photons incident on a slab of finite thickness but infinite extent. This quantity is obtained for a set of discrete values of slab thickness, in mean free paths, over the interval (0,20); incident energy, in units of mc squared, over the interval (1,20); and incident angle, in degrees, over the interval (0,90). Pb and Fe are used for the slab. The processes used to obtain the set of build-up factors and to establish their accuracy within reasonable limits are such that a considerable amount of supplementary information is produced. This information is also presented. The supplementary results consist of the probabilities and expected energies corresponding to the transmission of photons with exactly 1, 2, of 3 scatterings; distributions of the transmitted photons over energy and angle; some results for slabs of air and of the pure Compton scatterer; some build-up factors in an energy range just below that stated above; photon and energy densities for 3 source configurations; and other quantities which on occasion might prove interesting or useful. A discussion of the effect of variation of the total

absorption coefficient on transmission probabilities is given which leads to estimates of build-up factors for a material of arbitrary atomic number Z.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604158

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604158.pdf

Size: 165 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604158>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOLUME 4,

Personal Author(s):

Wong, Jr , James P

Hastings, Jr, Cecil

Report Date:

24 Nov 1952

Media Count:

7 Page(s)

Report Number(s):

RAND-P-348

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) Analytical approximations of offset circle probability functions and Bessel functions are given.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422821

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/422821.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD422821>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SUB-OPTIMIZATION IN OPERATIONS PROBLEMS

Personal Author(s):

Hitch, Charles

Report Date:

18 Nov 1952

Media Count:

28 Page(s)

Report Number(s):

RAND-P-326

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604157

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604157.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604157>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON GAME-LEARNING THEORY AND SOME DECISION-MAKING EXPERIMENTS

Personal Author(s):

Flood, Merrill M

Report Date:

17 Nov 1952

Media Count:

40 Page(s)

Report Number(s):

P-346

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The paper reports on games in which a player learns to improve his strategy during the course of a sequence of plays. The fusion model developed by Bush and Mosteller to explain observed behavior of rats in experimental learning situations was used as the basis for both theoretical and experimental investigation of the efficiency of this type of stochastic process in learning to play games. The experiments reported were with human subjects. Their game- learning performance was compared with that of the 'stat-rat', represented by the fusion model with numerical values of the parameters estimated to fit experimental data for rats. The theoretical models accept basic assumptions of von Neumann-Morgenstern game theory and Bush-Mosteller learning theory. The theoretical and experimental results are directly relevant for any situation in which a sequence of decisions is made

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604156

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604156.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604156>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE INFLUENCE OF ENVIROMENTAL NONSTATIONARITY IN A SEQUENTIAL DECISION-MAKING EXPERIMENT

Personal Author(s):

Flood, Merrill M

Report Date:

17 Nov 1952

Media Count:

35 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) A study was made on a series of pilot experiments, and on their theoretical background, that investigated the effect on human decision-making of a belief that the environment is changing when in reality it is constant. The results suggest that subjects tend to search more among poorer alternatives when they believe that the situation is changeable, and in conformity with mathematical models suggested by W. K. Estes and R. R. Bush to describe the two types of decision-making behavior.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604155

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON PRIMITIVE MATRICES,

Personal Author(s):

Herstein, I N

Report Date:

12 Nov 1952

Media Count:

6 Page(s)

Report Number(s):

P-344

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Suppose that A is a square matrix consisting of nonnegative elements. In certain considerations it is important to know when all the elements of some power of A are strictly positive. Frobenius gave a very simple necessary and sufficient condition for this to happen. In this paper a simple proof of this result is given. This proof is algebraic in nature and avoids the use of the convergence of powers of a matrix.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422822

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/422822.pdf

Size: 3 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD422822>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A THEORY OF FATIGUE BASED ON UNBONDING DURING REVERSED SLIP

Personal Author(s):

Shanley, F R

Report Date:

11 Nov 1952

Media Count:

93 Page(s)

Report Number(s):

RAND-P-350

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) Fatigue is interpreted as a progressive unbonding of atoms as a result of reversal of slip caused by cyclic loading. The s-N equation is derived by using an exponential equation for crack growth and assuming that failure will occur when the crack reaches an arbitrary depth. The effect of stress on amplitude is introduced by using the term for inelastic strain from the Ramberg-Osgood empirical equation for the stress-strain curve. The resulting expressions agree with experimental data and afford a means of interpreting most of the known fatigue phenomena. They are also used to derive a new method of predicting the effects of loading of variable amplitude and to analyze the effects of a mean stress other than zero. The effects of notches are discussed in terms of stress-concentration factors.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604135

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604135.pdf

Size: 794 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604135>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TESTING ORGANIZATION THEORIES

Personal Author(s):

Flood, M M

Report Date:

01 Nov 1952

Media Count:

22 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) A discussion of a few typical theories of decision making in small human groups, and description of a few pilot experiments illustrating the kind of theoretical and experimental problems that are met in testing these theories

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604772

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UNDETERMINED WAGE PROBLEMS,

Personal Author(s):

Zeuthen,F

Report Date:

31 Oct 1952

Media Count:

38 Page(s)

Report Number(s):

T-25

TT-64 71266

Monitor Series:

64 71266

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604154

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604154.pdf

Size: 189 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604154>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOLUME 3

Personal Author(s):

Hastings, Jr, Cecil

Report Date:

30 Oct 1952

Media Count:

7 Page(s)

Report Number(s):

P-340

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Analytical approximations of offset circle probability functions and Bessel functions are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604153

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRANSIENT RESPONSE OF BUTTERWORTH APPROXIMATIONS OF IDEAL LOW-PASS FILTERS,

Personal Author(s):

Reich, Edgar

Report Date:

24 Oct 1952

Media Count:

9 Page(s)

Report Number(s):

P-339

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604150

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ACTIVITY ANALYSIS OF TECHNOLOGICAL STRUCTURES IN PRODUCTION: AN EXAMPLE,

Personal Author(s):

Reiter, Stanley

Report Date:

15 Oct 1952

Media Count:

13 Page(s)

Report Number(s):

P-335

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The activity analysis model seems particularly adapted to the study of technological structures in production, because particular pieces of technology (activities) are explicitly identified in the model, and specific decision variables (activity levels) are associated with them. While the existing formulation of the model does not permit distinctions between different groupings of the same set of activities, a minor modification which makes the model a sector-wise additive one rather than a completely additive one; yields the desired result. The paper is limited to the formulation of the sector-wise additive model, and the presentation of a simple example illustrating its application.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604146

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A FUNCTIONAL EQUATION OCCURRING IN THE THEORY OF DYNAMIC PROGRAMMING,

Personal Author(s):

Bellman,Richard

Report Date:

30 Sep 1952

Media Count:

24 Page(s)

Report Number(s):

P-329

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Consideration is given to a functional equation which arises in connection with dynamic programming problems involving non-linear utility functions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604148

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE LOGICAL STRUCTURE OF THE UTILITY CONCEPT,

Personal Author(s):

Bohnert,H G

Report Date:

29 Sep 1952

Media Count:

21 Page(s)

Report Number(s):

P-331

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper points out that entirely aside from the 'psychological' nature of the concept, utility suffers from various syntactical and semantical infirmities which are quite enough to produce the confusion felt in dealing with it. It is intended as a preliminary 'clearing of the ground' for an analysis of rational individual decision on the basis of a 'pleasure-like' concept. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604147

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS, VOLUME 2,

Personal Author(s):

Hastings,Cecil ,Jr

Report Date:

24 Sep 1952

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A series of approximations of the higher mathematical functions are presented.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604144

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EMPLOYMENT AND LABOR PRODUCTIVITY IN USSR RAILROADS, 1928-1950,

Personal Author(s):

Redding,A David

Report Date:

15 Sep 1952

Media Count:

35 Page(s)

Report Number(s):

P-327

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604142

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLYNOMIAL-LIKE APPROXIMATION,

Personal Author(s):

Gross,Oliver

Report Date:

05 Sep 1952

Media Count:

7 Page(s)

Report Number(s):

P-323

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This is a short note on approximate representation for computing purposes of continuous real-valued functions of several real variables by finite sums of functions separable in the individual variables. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA800002

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Some Results in Nonlinear Programming. Part 2,

Personal Author(s):

Thrall, R M

Report Date:

05 Sep 1952

Media Count:

15 Page(s)

Report Number(s):

RAND/RM-935

XD-XD

Contract Number:

AF 33(038)6413

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604141

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A RANDOM WALK RELATED TO THE CAPACITANCE OF THE CIRCULAR-PLATE CONDENSER,

Personal Author(s):

Reich,E

Report Date:

02 Sep 1952

Media Count:

8 Page(s)

Report Number(s):

P-322

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that the solution of a certain class of integral equations, among them Love's equation for the circular-plate condenser, can be expressed in terms of the mean duration of a one-dimensional random walk with absorbing barriers. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604151

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MULTIDIMENSIONAL UTILITIES,

Personal Author(s):

Hausner,Melvin

Report Date:

20 Aug 1952

Media Count:

24 Page(s)

Report Number(s):

P-336

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A generalization of the von Neumann and Morgenstern theory of utility, by omission of the Archimedean postulate, and an extension to the infinite dimensional case are given. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604138

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYTICAL APPROXIMATIONS,

Personal Author(s):

Hastings,Cecil ,Jr

Report Date:

12 Aug 1952

Media Count:

3 Page(s)

Report Number(s):

P-317

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A series of approximations of the higher mathematical functions are presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604137

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EVEN IN MEMORYLESS ROBOTS THERE IS NO SMALL NUMBER OF CENTRAL CELLS SUFFICIENT FOR ALL INPUT-OUTPUT SPECIFICATIONS,

Personal Author(s):

CULBERTSON,J T

Report Date:

12 Aug 1952

Media Count:

11 Page(s)

Report Number(s):

P-316

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that in a memoryless robot some specifications require approximately 2^n cells. (The proof depends on the realistically unavoidable assumption that there is some maximum number of endbulbs that can contact any one cell.) It is also shown that no significant economies can be achieved by assigning more complex properties to the synapse. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604140

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN AXIOMATIC APPROACH TO MEASURABLE UTILITY,

Personal Author(s):

Herstein, I N

Milnor, John

Report Date:

12 Aug 1952

Media Count:

11 Page(s)

Report Number(s):

P-319

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Previous treatments of this approach brought topological considerations of the prospects space into the axioms. In this paper considerations of the topology of the prospect space itself are removed, the previous axioms are weakened an infinite number of sure prospects are allowed. On the basis of these axioms the existence of a measurable utility is established.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604139

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NON-NEGATIVE SQUARE MATRICES,

Personal Author(s):

Debrue, Gerard

herstein, I N

Report Date:

11 Aug 1952

Media Count:

18 Page(s)

Report Number(s):

P-318

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Non-negative indecomposable matrices are studied from the point of view of the Brouwer fixed point theorem; a concise proof of their basic properties is thus obtained. Properties of a general non-negative square matrix A are derived from those of non-negative indecomposable matrices. Theorems about the matrix $sl-A$ are proved; they cover in a unified manner a number of results recurringly used in economics. A systematic study of the convergence of $A(P)$ when p tends to infinity (A is a general complex matrix) is linked to combinatorial properties of non-negative square matrices.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604136

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RAND COLLECTION OF ILLUSTRATIVE APPROXIMATIONS,

Personal Author(s):

Hastings, Cecil, Jr

Report Date:

07 Aug 1952

Media Count:

5 Page(s)

Report Number(s):

P-314

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Loose leaf sheets that contain interesting and useful approximations to a number of the higher transcendental functions are discussed. A sample sheet is displayed, somewhat reduced photographically from its original notebook size. The approximations given are of both a practical and of an illustrative nature. The sheets of approximations give interesting information concerning the location of roots - points at which function and approximation agree - and the location of extremals - points at which the deviation between function and approximation is locally a maximum in an absolute or relative sense. The error curves that appear on each sheet gives an analytical approximation in a wide variety of typical cases of practical importance.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA800043

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Some Results in Non-Linear Programming.

Personal Author(s):

Thrall, R M

Report Date:

06 Aug 1952

Media Count:

17 Page(s)

Report Number(s):

RAND/RM-909

XD-XD

Contract Number:

AF 33(038)6413

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604238

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON J. VON NEUMANN'S 'THE PROBLEM OF OPTIMAL ASSIGNMENT IN A TWO-PERSON GAME',

Personal Author(s):

Dantzig, G B

Report Date:

21 Jul 1952

Media Count:

7 Page(s)

Report Number(s):

P-435

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Certain arguments in J. von Neumann's paper reducing the optimal assignment problem to a two-person game can be simplified. A simple observation produces a proof that all vertices of the convex of solutions (or a related continuous problem) are permutations; hence, admissible solutions to the original combinatorial problem. (This is a modification of the author's proof that optimal solution to the transportation problem is integral if the row and column totals are integers.) The present proof depends on a well-known and easily verified theorem that the vertex of a convex defined by m-linear equations

in n -non-negative variables (considered as a point in R^N) has at most m positive components.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422820

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/422820.pdf

Size: 973 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD422820>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Reliability in Guided Missile Systems

Personal Author(s):

Carhart, Richard R

Report Date:

07 Jul 1952

Media Count:

18 Page(s)

Report Number(s):

RAND-P-315

X0-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Abstract:

(U) The technical problem of reliability in guided missile systems is discussed. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604133

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SPONTANEOUS FISSION VERSUS ALPHA-DECAY,

Personal Author(s):

Kramish,Arnold

Report Date:

02 Jul 1952

Media Count:

5 Page(s)

Report Number(s):

P-307

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A plot of the ratio of spontaneous fission half-lives to alpha disintegration half-lives vs. the fissionability parameter (Z^2/A) indicates that, in the case of even-even nuclei, the spontaneous mode of decay becomes the more predominant as Z^2/A increases. The opposite appears to be true for odd-neutron nucleides. The effect of the odd neutron may be such as to favor an anomalously higher frequency for a highly assymetric configuration; i.e., a configuration leading to alpha decay.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604132

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEW CURRENTS IN AN OLD STREAM,

Personal Author(s):

Thompson,Frederick B

Report Date:

02 Jul 1952

Media Count:

12 Page(s)

Report Number(s):

P-306

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper gives a simple explanation of some of the notions of game theory as an example of new developments in mathematics. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604130

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THERMAL STRESSES IN CONICAL SHELLS,

Personal Author(s):

Huth,J H

Report Date:

12 Jun 1952

Media Count:

14 Page(s)

Report Number(s):

P-304

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper considers the stresses in a conical shell of revolution resulting from aerodynamic pressure and thermal gradients. In particular the results are applicable to the conical tip of a missile flying at zero angle of attack; a numerical example is given for a temperature distribution typical of a laminar boundary layer. It is concluded that from the standpoint of eliminating high stresses, large temperature gradients both along a ray and across the shell thickness are most undesirable. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604131

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE DETECTION OF A SINE WAVE IN GAUSSIAN NOISE,

Personal Author(s):

Reich,Edgar

Swerling,Peter

Report Date:

11 Jun 1952

Media Count:

28 Page(s)

Report Number(s):

P-305

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper deals with the problem of finding the 'optimum' method of detecting a sine wave of known frequency and amplitude in the presence of noise. The type of noise considered is the so-called stationary Gaussian process, which is obtained when thermal noise is passed through an arbitrary linear passive device. The analysis takes into account the fact that in practice only a finite sample of observed signal is available. The optimum detection method is defined as that which maximizes the probability of recognizing the presence of a sine wave if one has actually appeared; while the probability of falsely announcing the presence of sine wave, if none has actually appeared, does not exceed some prechosen value. It is shown that when the noise has a flat spectrum, all the relevant information is contained in the amplitude and phase of the Fourier transform of the received sample at the frequency of the sine wave. Almost the same result holds in the case where the noise has an exponentially decaying autocorrelation, except that in this case the values of the observed sample at the endpoints of the sample also play a role. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604128

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ARE WE SURE ABOUT DISPERSAL ,

Personal Author(s):

Cooper,Gershon

McKean,Ronald N

Report Date:

19 May 1952

Media Count:

30 Page(s)

Report Number(s):

P-301

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper questions dispersal as a sound means of prevention and defense against war.

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604086

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON SOLOW 'STRUCTURE OF LINEAR MODELS,'

Personal Author(s):

Herstein, I N

Report Date:

28 Apr 1952

Media Count:

4 Page(s)

Report Number(s):

P-298

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In his paper 'On the Structure of Linear Models' Solow makes extensive use of some results about the characteristic roots of indecomposable nonnegative matrices which are due to Frobenius. A recent paper by Helmut Wielandt gives a drastically simplified proof of these results of Frobenius; moreover, in several places the results are sharpened. One of the purposes of writing this note is to bring this paper and its translation into English by Herstein to the attention of economists. Debreu and Herstein have succeeded in simplifying even further the proof of these results. It is pointed out here how these results are applicable in either simplifying, or obviating the need of, several of Solow's proofs. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604129

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SOCIAL EQUILIBRIUM EXISTENCE THEOREM,

Personal Author(s):

Debreu, Gerard

Report Date:

24 Apr 1952

Media Count:

12 Page(s)

Report Number(s):

P-303

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In a wide class of social systems each agent has a range of actions among which he selects one. His choice is not however entirely free and the actions of all the other agents determine the subset to which his selection is restricted. Once the action of every agent is given, the outcome of the social activity is known. The preferences of each agent yield his complete ordering of the outcomes and each one of them tries by choosing his action in his restricting subset to bring about the best outcome according to his own preferences. The existence theorem presented here gives general conditions under which there is for such a social system an equilibrium, i.e., a situation where the action of every agent belongs to his restricting subset and no agent has incentive to choose another action.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422819

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HYPOTHETICAL ROBOTS AND THE PROBLEM OF NEUROECONOMY,

Personal Author(s):

Culbertson, J T

Report Date:

22 Apr 1952

Media Count:

58 Page(s)

Report Number(s):

P296

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The two main points are (1) general methods for constructing robots and (2) the necessity for finding more economical general methods of construction economical in number of neurons. The introduction (except for page 13) may be omitted by readers already familiar with nerve nets. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604083

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604083.pdf

Size: 986 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604083>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) APPLICATIONS OF THE KAC-SIEGERT METHOD FOR FINDING OUTPUT PROBABILITY DENSITIES FOR RECEIVERS WITH SQUARE LAW DETECTORS

Personal Author(s):

Emerson, R C

Report Date:

14 Apr 1952

Media Count:

32 Page(s)

Report Number(s):

RAND/P-294

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The method of Kac and Siegert for finding the output probability density characteristic function for receivers with square law envelope detections is discussed and a parallel development is given for the square law rectifier. Procedures are then outlined for determining the probability density functions directly, i.e., without solving the eigenvalue problem or inverting the characteristic function. The method depends on expanding the density function in an orthonormal series the coefficients of which are expressed in terms of cumulants which in turn are obtained from the system kernel by straightforward quadratures. As an example to illustrate the procedure, a receiver with Gaussian I. F. and Gaussian audio frequency pass characteristics is treated in detail, and the output probability density functions are found for various sinusoidal input signal strengths and I. F. vs. audio bandwidth ratios.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604082

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EXTENSION OF THE BROWN-ROBINSON ITERATIVE PROCESS FOR FINDING THE VALUE OF A GAME,

Personal Author(s):

Danskin,J M

Report Date:

09 Apr 1952

Media Count:

16 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Brown conjectured, and Robinson proved the validity of an iterative process for finding the value of a finite zero-sum two-person game. It is the purpose of this paper to show that the corresponding process is valid for zero-sum two-person games with continuous payoffs, played over the direct product of arbitrary compact spaces. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604085

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) QUOTA SOLUTIONS OF N-PERSON GAMES,

Personal Author(s):

SHAPLEY,L S

Report Date:

07 Apr 1952

Media Count:

25 Page(s)

Report Number(s):

P-297

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A family of solutions for a class Q of n-person games which embraces all constant-sum four-person games and a not inconsiderable array of higher games is presented. They are called 'quota games' because it is possible in them to define a system of individual quotas for the players which determines the effectiveness of the various two-player coalitions. In the solutions most of the players receive their quotas, but there is some latitude for bargaining. The solutions are typically onedimensional sets, consisting sometimes of n line segments joined at the quota point, sometimes of n - 1 disconnected segments. Their behavior under variation of the characteristic function of the game is continuous.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604076

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE 'POLICY SCIENCES': ASPIRATION AND OUTLOOK,

Personal Author(s):

Kecskemeti,Paul

Report Date:

01 Apr 1952

Media Count:

26 Page(s)

Report Number(s):

P-287

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604079

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CONTINUOUS MODEL OF TRANSPORTATION,

Personal Author(s):

Beckmann,Martin

Report Date:

25 Mar 1952

Media Count:

28 Page(s)

Report Number(s):

P-290

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Interlocal commodity flows are considered in terms of vector fields. Efficient transportation then gives rise to a problem in the calculus of variations; the flow functions solving this problem contain price distribution functions as parameters. With net production functions dependent on prices, the model describes the flow and prices in a competitive regional market economy. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604084

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A VALUE FOR N-PERSON GAMES,

Personal Author(s):

Shapley,L S

Report Date:

18 Mar 1952

Media Count:

14 Page(s)

Report Number(s):

P-295

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the finite theory of von Neumann and Morgenstern difficulty in evaluation persists for the essential games, and for only those. In this paper a value is deduced for the essential case and a number of its elementary properties are examined. A set of three axioms, having simple intuitive interpretations, which suffice to determine the value uniquely serves as a starting point.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604075

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE ASYMPTOTIC EFFICIENCY OF CERTAIN NONPARAMETRIC TWO-SAMPLE TESTS,

Personal Author(s):

MOOD,A M

Report Date:

17 Mar 1952

Media Count:

18 Page(s)

Report Number(s):

P-280

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In this paper the following asymptotic efficiencies are computed for the given two-sample tests against normal alternatives to the null hypothesis: rank test for location $3/\pi$, median test for location $2/\pi$, run test for location 0, run test for dispersion 0, and square rank test for dispersion $15/2$ sq. π .

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604072

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THERMAL STRESSES IN A PARTIALLY CLAMPED ELASTIC HALF-PLANE,

Personal Author(s):

HUTH,J H

Report Date:

10 Mar 1952

Media Count:

12 Page(s)

Report Number(s):

P-274

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Numerical methods have made amenable to approximate analysis a large class of problems in the theory of elasticity. However, certain loadings must occasionally be considered which may give rise to theoretical stress singularities. One such problem is that of determining the thermal stresses in a partially clamped elastic half-plane. The solution given assumes selfequilibrating tractions over the clamped portion of boundary so that the results apply approximately also to large finite areas. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604074

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET AGRICULTURAL PROSPECTS,

Personal Author(s):

KERSHAW,Joseph A

Report Date:

07 Mar 1952

Media Count:

23 Page(s)

Report Number(s):

P-278

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604770

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE THEORY OF LINEAR INEQUALITIES,

Personal Author(s):

Motzkin,Theodor

Report Date:

07 Mar 1952

Media Count:

90 Page(s)

Report Number(s):

TT-64 71264
Monitor Series:
64 71264
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604073
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) TRENDS IN SOVIET INDUSTRIAL PRODUCTIVITY,
Personal Author(s):
Galenson, Walter
Report Date:
06 Mar 1952
Media Count:
31 Page(s)
Report Number(s):
P-276
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Russian statistics indicate an annual rate of growth (compounded) of productivity, for manufacturing and mining, of 10.3 per cent from 1928 to 1940. Other data indicate, however, that this figure would be much smaller if computed in accordance with conventional American techniques. Very substantial productivity gains were achieved under the prewar Five Year Plans, with heavy industry leading the way and the consumer goods industries lagging far behind. On the basis of comparisons of physical output per wage earner for a series of industries, for years immediately preceding World War II, it was concluded that, very roughly, Russian industry in 1939 stood at 40 per cent of the American labor productivity level. There was wide variation among industries. The Russians claim that their average rate of productivity growth from 1946 to 1950 was 13.25 per cent, and that by 1950, average industrial labor

productivity exceeded the 1940 level by 37 per cent. A gain on the order of from 5 to 10 per cent over 1940 would appear to be more realistic.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604071

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE WHAT AND THE HOW ARE BOTH ESSENTIAL TO MUNITIONS PRODUCTION,

Report Date:

03 Mar 1952

Media Count:

1742 Page(s)

Report Number(s):

P-273

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An overview of U. S. manufacturing industries indicates that the firms having the greatest manufacturing know-how are primarily interested in non-war goods and regard their occasional entries into the production of munitions as a necessary but undesirable sacrifice to patriotism. The conclusion is drawn that in order to get weapons at low cost and when they are needed, the production of munitions must be made stable enough and respectable enough to either (a) attract those who now have the knowhow into the business on a permanent basis or (b) create a new competitive industry which will create its own type of know-how.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604070

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/604070.pdf

Size: 774 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD604070>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME PRACTICAL PROBLEMS OF THE ALERTNESS INDICATOR

Personal Author(s):

Kennedy, John L

Report Date:

29 Feb 1952

Media Count:

12 Page(s)

Report Number(s):

P-272

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) An evaluation was made of automatic devices used for alerting personnel when they are in a dangerous condition of drowsiness or fatigue. The problem of personnel alertness is also dealt with from a practical point of view.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422815

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUIVALENCE OF INFORMATION PATTERNS AND ESSENTIALLY DETERMINATE GAMES,

Personal Author(s):

Dalkey, Norman

Report Date:

20 Feb 1952

Media Count:

38 Page(s)

Report Number(s):

Rept. no. P265

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

DDC users only.

Abstract:

(U) A necessary and sufficient condition is derived for the equivalence of information patterns in general games. Calling a general game essentially determinate if it has an equilibrium point in pure strategies for every possible payoff function, a necessary and sufficient condition for essential determinateness is derived in terms of the information pattern. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604003

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET CONCEPT OF ECONOMIC REGIONALIZATION,

Personal Author(s):

Shabad, Theodore

Report Date:

19 Feb 1952

Media Count:

13 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Economic regionalization in the USSR is an instrument employed by the Soviet regime in political and economic policies -- political in the sense of maintaining its power through proletarian centers of industrial workers and furthering the security of the country through regional self-sufficiency; economic in the sense of industrializing underdeveloped parts of the country, reducing unnecessary long-distance freight hauls, and creating units for the local, quasi-autonomous planning of economic activities.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422818

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTERNATIONAL POLITICAL COMMUNICATION: ELITE VS. MASS,

Personal Author(s):

Speier, Hans

Report Date:

15 Feb 1952

Media Count:

18 Page(s)

Report Number(s):

P270

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422811

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF SOME FAILURE DATA,

Personal Author(s):

Davis,D J

Report Date:

12 Feb 1952

Media Count:

41 Page(s)

Report Number(s):

P183

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: Microfiche only after original copies exhausted.

Abstract:

(U) A summary is given of the rationale and statistical techniques employed in the analysis of some failure data obtained from operations performed by machines and people. These data are compared to frequency distributions arising from either an exponential or a normal theory of failure. The agreement between theory and data is evaluated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422817

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USES AND LIMITATIONS OF MATHEMATICAL MODELS, GAME THEORY AND SYSTEMS ANALYSIS
IN PLANNING AND PROBLEM SOLUTION,

Personal Author(s):

Kennedy, John L

Report Date:

11 Feb 1952

Media Count:

21 Page(s)

Report Number(s):

P266

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604002

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PREFERENCE EXPERIMENT (SERIES 2, TRIALS 2, 3, 4),

Personal Author(s):

Flood, M M

Report Date:

25 Jan 1952

Media Count:

24 Page(s)

Report Number(s):

P-263

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Trials 2, 3, and 4 of a preference experiment described in AD603 998 are reported. A group of seven subjects was required to select one from among a group of objects and to dispose of it among themselves. The objects were miscellaneous items such as a banjo, flower bowl, etc., donated by the subjects. The subjects were all RAND employees. The trials reported here were concerned with non-zero-sum game theory and closely related mathematical theories relating to group decision processes, as in the first trial. Variations were introduced in these trials by using experienced subjects, and by using chances at objects in place of the objects used in Trial 1. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604001

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PHYSICAL PROPERTIES OF THE ATMOSPHERE BETWEEN APPROX. 80 KM AND 250 KM,

Personal Author(s):

KALLMANN,H K

Report Date:

04 Jan 1952

Media Count:

14 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A relation between the fractional change of concentration with change in height, provided a temperature and its gradient are known at one height, gives the possibility of determining the change in molecular weight with change in temperature and altitude. The molecular weight of the atmosphere between 80 km and 125 km was obtained, assuming molecular oxygen dissociates in this region. The molecular weight of the atmosphere between 130 km and 250 km was obtained, assuming nitrogen dissociates in this region. The calculated values for pressure and density agree quite well with the data

obtained from rocket flights, although one may regard this approach as satisfactory only in a qualitative way, because of the rather simple form chosen for the fractional change of concentration with change in height. But in view of the uncertainties involved in determining the radiation density, absorption cross section, etc., it is believed that the proposed treatment gives correctly the essential features such as total pressure, mean molecular weight, mean density, and average particle density of the atmosphere at the altitudes considered. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604000

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELIABILITY OF ESTIMATES OF UNFREE LABOR IN THE USSR,

Personal Author(s):

Redding,A D

Report Date:

02 Jan 1952

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The official USSR Plan for 1941 gives output data both for the entire economy and the NKVD (the commissariat responsible for unfree labor), as well as input data for free laborers only. The problem is to estimate from this information the size of the unfree labor force.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603999

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A QUANTITATIVE ANALYSIS OF TWO PROPOSED MECHANISMS FOR VERTICAL OZONE TRANSPORT IN THE LOWER STRATOSPHERE,

Personal Author(s):

Kellogg, William W

Report Date:

17 Dec 1951

Media Count:

4 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603915

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FIRST PASSAGE AND RECURRENCE DISTRIBUTIONS,

Personal Author(s):

Harris, T E

Report Date:

14 Dec 1951

Media Count:

28 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A random walk on the integers is considered with transition probabilities p_k for the transition k to $k + 1$ and $1 - p_k$ for the transition k to $k - 1$. Distributions and moments are found for the length of time required to travel between any two given states. Some limiting results, applicable to more general results, are given. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603998

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PREFERENCE EXPERIMENT (SERIES 2, TRIAL 1),

Personal Author(s):

Flood, M M

Report Date:

05 Dec 1951

Media Count:

44 Page(s)

Report Number(s):

P-258

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An experiment is reported in which a group of seven subjects were required to select one from among eleven objects and to dispose of it among themselves. Their solution is compared with others possible, such as those suggested by game-theoretic considerations, and it is considered that the group failed by a substantial margin to find an optimal selection and disposition. Deficiencies of majority voting, as a decision process, are noted and psychological factors enter into the group process in an important fashion. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603919

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/603919.pdf

Size: 923 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD603919>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE HITCHCOCK DISTRIBUTION PROBLEM

Personal Author(s):

Flood, Merrill M

Report Date:

Dec 1951

Media Count:

22 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603991

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TEMPERATURES AND MOTIONS OF THE UPPER ATMOSPHERE,

Personal Author(s):

Kellogg, William W

Report Date:

17 Nov 1951

Media Count:

34 Page(s)

Report Number(s):

P-246

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603995

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A CLASS OF GAMES,

Personal Author(s):

Karlin, Samuel

Report Date:

16 Nov 1951

Media Count:

1 Page(s)

Report Number(s):

P-254

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper describes qualitatively the nature of optimal strategies for a payoff kernel $K(x,y)$ defined on the unit square satisfying $K \leq y \dots y(x,y) \leq 0$ with n partial derivatives taken with respect to y . A complete analysis for $n \leq 4$ is presented. However, the method employed easily extends and enables, by enumerating cases, the situation for general n to be solved. Specifically, it is shown that for $n = 3$ and $n = 4$ the maximizing player has optimal strategies involving respectively at most 3 points and at most 4 points of increase. For general n , it can be shown that the maximizing player has optimal strategies using at most n points. For the minimizing player the statement of the nature of an optimal strategy is more precise. There always exist for the general case optimal solutions using at most $n/2$ points, with the understanding that the end points 0 or 1 when used are each counted only half. For example when n is odd, then $n/2$ is a half integer and hence must use a single end point if a full optimal strategy exists employing $n/2$ points. This counting procedure applies only to the minimizing strategies. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422814

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ECONOMETRIC MODEL OF INTER-INDUSTRY MATERIAL FLOWS.

Personal Author(s):

Shepard,Ronald W

Report Date:

15 Nov 1951

Media Count:

27 Page(s)

Report Number(s):

P251

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603997

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PREFERENCE EXPERIMENT,

Personal Author(s):

Flood,M M

Report Date:

13 Nov 1951

Media Count:

45 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The experiment reported in this paper was conducted in order to gain some experience in the organization, administration, and analysis of other of its general type. The type has been selected in an effort to find one that permits testing of a wide variety of mathematical theories pertinent to be study of social organizations. The one trial reported here is used only for convenience, as an example, in this very preliminary discussion of the planned experimental series. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603996

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLUTIONS OF CONVEX GAMES AS FIXED-POINTS,

Personal Author(s):

Dresher,M

Karlin,S

Report Date:

12 Nov 1951

Media Count:

1 Page(s)

Report Number(s):

P-255

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An optimal strategy of a game is viewed mathematically as a fixed-point in a continuous mapping. Using this interpretation, some general dimensional properties of solutions are derived for games played over arbitrary convex sets. By mapping one convex set onto another, it is shown, with examples, how to compute the solutions of a game. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422816

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) USE OF THE LEARNING CURVE,

Personal Author(s):

Novick,David

Report Date:

09 Nov 1951

Media Count:

6 Page(s)

Report Number(s):

P267

Report Classification:

Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0603994
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE CURRENT AND PREDICTED STATUS OF ENGINEERING TECHNIQUES IN RELATION TO HUMAN
TRAVEL AT UPPER ALTITUDES,
Personal Author(s):
Salter,R M
Report Date:
01 Nov 1951
Media Count:
11 Page(s)
Report Number(s):
P-249
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:
(U) Consideration is given to the 'how' and 'when' of manned spaceflight. Topics include: regimes of
flight in the aeropause; motivating techniques required engineering limitations.
Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604061

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SOLUTION OF THE LAMINAR BOUNDARY LAYER EQUATIONS FOR A COMPRESSIBLE FLUID WITH VARIABLE PROPERTIES, INCLUDING DISSOCIATION.

Descriptive Note:

Master's thesis,

Personal Author(s):

Moore,L L

Report Date:

01 Nov 1951

Media Count:

80 Page(s)

Report Number(s):

P-50

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The laminar boundary layer equations are solved for a flat plate in compressible flow where equilibrium dissociation of the air is assumed as well as variable air properties. Evaluation of the skin friction and heat transfer characteristics is made for a Mach number range 1 to 20. Both the insulated plate without radiation and the plate with heat transfer are considered. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603892

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CHOICE AMONG INVESTMENT ALTERNATIVES IN SOVIET ECONOMIC THEORY,

Personal Author(s):

Kaplan,Norman

Report Date:
31 Oct 1951
Media Count:
25 Page(s)
Report Number(s):
P-177
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0603993
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE THEORY OF INFINITE GAMES,
Personal Author(s):
Karlin, Samuel
Report Date:
18 Oct 1951
Media Count:
55 Page(s)
Report Number(s):
P-248
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper develops in an abstract way the theory of infinite games. The kernel is replaced by an operator and the distributions by suitably chosen Banach spaces and the complete theory of the determinateness of a game is studied. Both weak and uniform upper and lower values are introduced and are related. A study of Bayes solutions are given and an analysis of the change of the value under perturbation of the operator is pursued. Some new examples of determinate games are presented to illustrate the general theory. A further discussion on non-linear games and the Wald Theory is also

given. Games invariant under groups of transformations are also discussed. The usual terminology of the theory of games developed in the Annals of Mathematics Studies 24 is freely employed. A future paper on the applications of this theory to statistical decision functions is intended. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603990

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF THREE-MOVE FINITE GAMES,

Personal Author(s):

Dresher,M

Helmer,O

Wagner,R

Report Date:

16 Oct 1951

Media Count:

12 Page(s)

Report Number(s):

P-245

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The complexity of possible information patterns increases with the number of moves available to the players. If it is assumed that a move is made with either complete or no knowledge about the other move, a 2move game has only two possible patterns of information. Either there is perfect information, and thus one move precedes the other, or there is no information, in which case the moves are in effect made simultaneously. In each case the game has a value and optimal strategies,- - a pure strategy in the case of perfect information, and generally mixed strategies if the moves are made simultaneously. A 3-move game, i. e., one in which two moves are made by one player and one by the other, introduces many additional types of information patterns. Again, it is assumed that information, if any, about a preceding move is complete. At the time of his second move, the player with two moves may have

forgotten his first move or the information known at this first move. The effect of this introduction of imperfect recall is to yield a game without a value. Further, in these cases it is generally impossible to express the 3-move game in normal form. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA412608

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/a412608.pdf

Size: 18 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/ADA412608>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Air Defense Study. R-227 (ABRIDGED)

Report Date:

15 Oct 1951

Media Count:

360 Page(s)

Report Number(s):

RAND-R-227

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) RAND has investigated the air defense of the United States from the earliest date at which a serious enemy threat is believed to exist until that time in the future when it becomes impossible to predict the scientific progress in either our own or the enemy's weapons with any degree of confidence

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603988

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REDUCTION OF CERTAIN CLASSES OF GAMES TO INTEGRAL EQUATIONS,

Personal Author(s):

Karlin, Samuel

Report Date:

09 Oct 1951

Media Count:

42 Page(s)

Report Number(s):

P-241

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper investigates the relationship of certain classes of games with corresponding integral equations. The essential part of the optimal strategies is obtained by solving associated integral equations. Part I treats the general game of timing. The second part examines payoff kernels which are concave on each side of the diagonal $x=y$. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603989

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON H. J. BARNETT'S 'SPECIFIC INDUSTRY OUTPUT PROJECTIONS,'

Personal Author(s):

Marshall,A W

Report Date:

01 Oct 1951

Media Count:

6 Page(s)

Report Number(s):

P-243

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Projection methods using input-output tables are compared with Barnett's multiple regression method. An alternative method is suggested using the observed production by industry and the projected production as vectors in n dimensional Euclidean space, and the error of projection as the distance between the two points.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603979

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME OBSERVATIONS ON THE ROLE OF RESEARCH IN POLITICAL WARFARE,

Personal Author(s):

Davison,W Phillips

Report Date:

01 Oct 1951

Media Count:

31 Page(s)

Report Number(s):

P-226

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The theory of political warfare is discussed in terms of national behavior, politically relevant trends, policymaking, propaganda, and psychological warfare techniques.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0615143

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CHEMICAL KINETICS AND ROCKET NOZZLE DESIGN,

Personal Author(s):

Krieger, F J

Report Date:

20 Sep 1951

Media Count:

28 Page(s)

Report Number(s):

P-237

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The effect of chemical kinetics on rocket nozzle design was investigated for the particular case of hydrogen gas flowing adiabatically through a typical rocket nozzle having a chamber-to-throat-area ratio of 2 to 1. For comparative purposes the following types of flow were considered: (a) constant composition (frozen equilibrium), (b) instantaneous chemical equilibrium (shifting equilibrium), and (c) kinetic chemical equilibrium. A stepwise iteration process was employed to perform the integration of the differential equation in case (c). In each case the gas entered the nozzle at a temperature of 3500K

and a pressure of 20 atm and was allowed to expand isentropically to an exhaust pressure of 1 atm. The results for a mass flow rate of 1000 gm/sec are presented. The instantaneous equilibrium flow assumption not only gives a higher specific impulse, but also requires a larger nozzle than either the kinetic or the constant composition flow assumption. The kinetic equilibrium flow results are intermediate between those for instantaneous equilibrium flow and those for constant composition flow, the relative position depending on the magnitude of the reaction rate which governs the kinetic equilibrium. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603984

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE EVALUATION OF NOISE SAMPLES,

Personal Author(s):

Siegert,Arnold J F

Report Date:

07 Sep 1951

Media Count:

17 Page(s)

Report Number(s):

P-236

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Unless the primary source of noise in one of those which are theoretically tractable, the statistical properties of the noise have to be inferred from samples. We have developed some criteria to aid in the decision whether a sample can reasonably be assumed to have come from a Gaussian noise with predetermined parameters. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603992

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DEFINITE AND SEMI-DEFINITE QUADRATIC EQUATIONS.

Descriptive Note:

Cowles Commission Discussion Paper, Mathematics,

Personal Author(s):

Debreu, Gerard

Report Date:

06 Sep 1951

Media Count:

11 Page(s)

Report Number(s):

P-247

CowlesDP-408

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603916

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SPECIFIC INDUSTRY OUTPUT PROJECTIONS,

Personal Author(s):

Barnett, Harold J

Report Date:
01 Sep 1951
Media Count:
60 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0603923
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) METHODOLOGY FOR COMMUNICATIONS RESEARCH,
Personal Author(s):
George, A L
Report Date:
31 Aug 1951
Media Count:
1 Page(s)
Report Number(s):
P-217
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In existing literature on content analysis most discussions of methodology have been focused on problems of content description with content analysis itself usually defined in terms of content description. In many types of communications research, however, content is described in order to make inferences about its conditions or its effects. This paper is concerned with the methodological problems encountered when inferences are made from content about the antecedent conditions of that content. The questions, what procedures can one most fruitfully follow in attempting to draw inferences about conditions and how can these inferences be supported or justified, are examined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603982

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON A CLASS OF INTEGRAL EQUATIONS RELATED TO THE BESSEL AND MATHIEU FUNCTIONS,

Personal Author(s):

Bellman, Richard

Report Date:

24 Aug 1951

Media Count:

9 Page(s)

Report Number(s):

P-233

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603981

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON SOME DYNAMIC LINEAR PROGRAMMING PROBLEMS,

Personal Author(s):

Bellman, Richard

Report Date:

10 Aug 1951

Media Count:

11 Page(s)

Report Number(s):

P-230

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A study is made of a class of mathematical problems connected with physical situations which require that a finite or unbounded sequence of operations be performed for the purpose of achieving a desired result. The only case considered here is that in which each operation performs a mapping of the parametric space onto itself. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604291

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUPERSONIC FLOW AROUND CONES AT LARGE YAW,

Personal Author(s):

YOUNG,G B W

Siska,C P

Report Date:

06 Aug 1951

Media Count:

43 Page(s)

Report Number(s):

P-198

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Equations were developed for the flow properties in the region bounded by a supersonic cone body at large angle of attack and its attached shock wave, for use with the tabulations of Kopal. A comparison of the theoretical results is made with the experimental data of Cronvich. A slight discrepancy which increases with increasing Mach number was found in the value of K_{DYH} , the yawing head drag as tabulated by Kopal. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607189

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) USE OF THE SPECIAL PROGRAM DEVICE ON THE 417 TABULATOR,

Personal Author(s):

Chiappinelli, Bruno

Report Date:

26 Jul 1951

Media Count:

8 Page(s)

Report Number(s):

RM-657

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Expansion of total programs from three to twenty-eight on the IBM 417 tabulator by use of the special program device. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603980

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GEOMETRY OF MOMENT SPACES,

Personal Author(s):

Karlin,S

Shapley,L S

Report Date:

23 Jul 1951

Media Count:

105 Page(s)

Report Number(s):

P-227

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents a natural geometrical approach to the theory of reduced moment spaces and its application to orthogonal polynomials. The work is concerned primarily with distribution functions on a finite interval.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603925

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/603925.pdf

Size: 817 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD603925>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A COMPARISON OF TREATMENTS OF A DUOPOLY SITUATION

Personal Author(s):

Mayberry, J P

Nash, J F

Shubik, M

Report Date:

10 Jul 1951

Media Count:

22 Page(s)

Report Number(s):

P-222

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper was to take a simple model of two firms in competition, with explicit cost functions and an explicit demand function, and to examine the behavior of the firms on the basis of each of several theories. It was assumed there is no collusion among the buyers, so that the demand function remains fixed and describes the action of the market. Each theory discussed, except the 'contract curve' of Edgeworth, gives a uniquely determined pair of production rates, and all the others, with the exception of the Von Neumann and Morgenstern solution, determine the profit made by each of the two producers. Graphs are given showing the production rates and profits for the various solutions, and will serve to compare the effect of the different formulations on the behavior of the firms.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603926

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE ITERATION OF POWER SERIES IN TWO VARIABLES,

Personal Author(s):

Bellman,Richard

Report Date:

05 Jul 1951

Media Count:

14 Page(s)

Report Number(s):

P-225

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605448

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COMBOMAT,

Personal Author(s):

Madden,J D

Report Date:

28 Jun 1951

Media Count:

9 Page(s)

Report Number(s):

P-216

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The 'combomat' is a system installed at RAND wherein persons requiring small amounts of computation may set up the work directly for an I.B.M. Card-Programmed Electronic Calculator. These persons are able to get all the information required for use of the system from a short manual in which no previous familiarity with computing machinery is assumed. The Card-Programmed Electronic Calculator setup currently in use employs an eight-place floating decimal and operates on mark sensed cards prepared by the customer. However, it is emphasized that the term, 'combomat', refers to a system rather than to a particular Card-Programmed Electronic Calculator setup and that the wiring may be as simple or as complex as the installation using the system requires. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603811

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECT OF CREEP ON COLUMN DEFLECTION,

Personal Author(s):

HIGGINS, T P , Jr

Report Date:

26 Jun 1951

Media Count:

54 Page(s)

Report Number(s):

-51

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The effect of creep on structural elements which carry compressive loads must be known in order that minimum weight structures may be designed for service conditions which are a combination of high temperature and high working stress. A simple pin-ended column is analyzed under similar conditions as a logical basis for future understanding of integrated structures. The creep buckling problem is formulated mathematically. However, due to the complexity of the problem, an iteration method is presented which enables one to calculate the lateral deflection as a function of time. Theoretical

calculations of the iteration method are compared with tests on 75 ST aluminum columns at 600F. Design curves are proposed which will give the allowable stress of the column as a function of the slenderness ratio and the life-time of the column. Different design curves are required for each combination of material and operating temperatures. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603924

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TIME-DEPENDENT STRESS-STRAIN DISTRIBUTIONS,

Personal Author(s):

HIGGINS,T P ,Jr

Report Date:

18 Jun 1951

Media Count:

20 Page(s)

Report Number(s):

P-218

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Using data which can be obtained from conventional constant stress tests, a method is developed to determine the amount of inelastic strain that occurs for non-linear stress-time variations. The method is applicable to transient and steady state creep and enables one to determine the stress-strain distributions when they are a function of time. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0623563

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COMPRESSIBLE BOUNDARY LAYER,

Personal Author(s):

Young, George B W

Janssen, Earl

Report Date:

01 Jun 1951

Media Count:

41 Page(s)

Report Number(s):

P-214

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The laminar boundary layer equations in integral form are solved on the mechanical differential analyzer. The method of analysis permits the use of the best known variation of the air properties with temperature. Solutions are obtained for Mach numbers ranging from incompressible speeds to the hypersonic regime at ambient temperatures of 100, 400 and 800R for both insulated plate and heat transfer cases. From these results an approximate design procedure for the calculation of the characteristics of both the laminar and turbulent boundary layers is obtained and presented as an aid to missile designers. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603917

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE GENERALIZED APPROACH TO THE SELECTION OF PROPULSION SYSTEMS FOR AIRCRAFT,

Personal Author(s):

WOODWORTH,L R

Kelber,C C

Report Date:

22 May 1951

Media Count:

99 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The generalized approach considers the powerplant in terms of the performance and application requirements of the aircraft. A powerplant choice for a given combination of these requirements represents a compromise between powerplant weight, frontal area, and fuel consumption. Parameters relating to the performance and application requirements of aircraft are used in simplified endurance equations, which encompass a broad range of applications, in combination with powerplant characteristics. By use of electronic calculating equipment, systematic evaluation of each powerplant type and variation within type is established for each selected combination of aircraft performance and application requirements. The powerplant is selected on the basis of maximum endurance which, under the method used, is equivalent to minimum total weight of powerplant plus fuel weight. The powerplant spectrum is represented by seven powerplant types; Rocket, Ram Jet, Afterburning Turbojet, Turbojet, Ducted Fan, Turboprop with varying power division between propeller and jet, and Reciprocating. Effects of compressor pressure ratio and turbine inlet temperature on the characteristics of the gas turbine family are considered. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603893

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A LARGE SAMPLE TEST OF THE HYPOTHESIS THAT ONE OF TWO RANDOM VARIABLES IS STOCHASTICALLY LARGER THAN THE OTHER,

Personal Author(s):

Marshall,A W

Report Date:

21 May 1951

Media Count:

14 Page(s)

Report Number(s):

P-179

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603918

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DRESHER'S INEQUALITY,

Personal Author(s):

DANSKIN,J M

Report Date:

18 May 1951

Media Count:

5 Page(s)

Report Number(s):

P-212

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This note gives an elementary proof of the Dresher inequality, based on the Minkowski inequality and an inequality due to Radon. The Radon inequality is gotten easily by transforming the Holder

inequality; thus Dresher's inequality is seen to be a melange of the Holder and Minkowski inequalities. It is appropriate to note here that Dresher's inequality is a generalization of an inequality due to Beckenbach.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422813

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF ORGANIZATION THEORIES.

Personal Author(s):

Simon, Herbert A

Report Date:

15 May 1951

Media Count:

21 Page(s)

Report Number(s):

P-219

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: microfilm copies only.

Abstract:

(U) It is the purpose of this paper to suggest a framework that permits a comparison of certain theories of organization that appear in the literature of economics with those in the literature of administration. The relations between the economist's theory of the firm and what is usually called in administrative writings the 'theory of organizational equilibrium' have never been made explicit, and writers in the one field often appear unaware of the possible implications for their work of the investigations that have been carried on in the other. Part I of this paper sets forth verbal descriptions and comparisons of the theories in question. In part II a mathematical framework is proposed capable of encompassing both theories as special cases. (Author)

Abstract Classification:
Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603921

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFICIENCY ASPECTS OF DISPERSAL OF POPULATION AND INDUSTRY,

Personal Author(s):

Koopmans,Tjalling C

Report Date:

May 1951

Media Count:

15 Page(s)

Report Number(s):

P-215

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses the dispersal of population and industries in terms of efficiency as a preparedness or war effort.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603987

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPARISONS OF INPUT-OUTPUT AND ALTERNATIVE PROJECTIONS, 1929-39,

Personal Author(s):

Arrow,Selma

Report Date:

14 Apr 1951

Media Count:

20 Page(s)

Report Number(s):

P-239

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The four alternative techniques of industrial production forecasting are compared under the hypothesis that all the basic data necessary for each method are available. Thus, in obtaining total output projections by the inputoutput method, it is assumed that actual final demands are known and in Barnett's regression analysis, that the true gross national products are known.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605054

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETAILED ANALYSIS OF SYNOPTIC WEATHER AS OBSERVED FROM PHOTOGRAPHS TAKEN ON TWO ROCKET FLIGHTS OVER WHITE SANDS, NEW MEXICO, JULY 26, 1948,

Personal Author(s):

Bjerknes,J

Report Date:

01 Apr 1951

Media Count:

26 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is shown that rocket pictures add a considerable amount of interesting information to the ordinary weathermap analysis, and in addition, that the accumulated knowledge from the maps helps in the new problem of interpreting what is seen from high-level rocket pictures.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603914

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COEFFICIENT OF RESOURCE UTILIZATION,

Personal Author(s):

Debreu, Gerard

Report Date:

Apr 1951

Media Count:

33 Page(s)

Report Number(s):

P-206

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A numerical evaluation of the 'dead loss' associated with a nonoptimal situation (in the Pareto sense) of an economic system is sought. Use is made of the intrinsic price systems associated with optimal situations of whose existence a noncalculus proof is given. A coefficient of resource-utilization yielding measures of the efficiency of the economy is introduced. The treatment is based on vector set properties in the commodity space. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA307813

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/a307813.pdf

Size: 6 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/ADA307813>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Utility of A Satellite Vehicle For Reconnaissance.

Personal Author(s):

Lipp, J E

Salter, R M , Jr

Wehner, R S

Carhart, R R

Culp, C R

Report Date:

Apr 1951

Media Count:

140 Page(s)

Report Number(s):

RAND-R-217

X0-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The basic feasibility of satellites from the point of view of rocket performance was considered in a previous group of RAND reports. Refs. 3 through 14. That investigation pointed to several important conclusions. First, the engineering of a rocket vehicle of adequate performance for use as a satellite

would require but minor development beyond the then existing technology. Secondly, the payload would have to be small (not more than 2000 lb) to keep the gross weight within reason; hence destructive payloads are not likely to be economically worth while for many years to come. Thirdly, returning the vehicle to earth intact would be difficult and should not be attempted in the early versions. The above factors indicated that the payload would be restricted to instrumentation and communication equipment and prompted the RDB (Technical Evaluation Group) and the Air Force to request that further attention be given to the question of utility. RAND's effort since 1947 on the satellite study has been closely tied to the payload-its description and military usefulness. Most attention has been directed toward reconnaissance, since that is a field in which a satellite may very well show advantages over other types of vehicles. It now appears fortunate that reconnaissance was selected for the first payload investigation. As will be seen later in the report, pioneer reconnaissance (general location and determination of appropriate targets) and weather reconnaissance are suitable with the resolving power presently available to a satellite television system. These two classes of reconnaissance have also been growing in importance to the Air Force, because of the vastness of Russia and the difficulty of gaining information by conventional means.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA307104

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/a307104.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/ADA307104>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Inquiry into the Feasibility of Weather Reconnaissance from a Satellite Vehicle,

Personal Author(s):

Greenfield, S M

Kellogg, W W

Report Date:

Apr 1951

Media Count:

55 Page(s)

Report Number(s):

RAND/R-218

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Abstract:

(U) It is assumed that, in the event of armed conflict, aerial weather reconnaissance over enemy territory, similar to that obtained in World War II, will be extremely difficult if not impossible. An alternative method of obtaining this information, however, is thought to lie in the use of the proposed satellite vehicle. It is obvious that any meteorological reconnaissance utilizing only observations from such a high-altitude 'eye' cannot provide quantitative values for the parameters normally associated with standard weather observation and forecasting techniques. In determining the feasibility of such a system therefore, the questions that must be answered are: (1) What extent of coverage can be expected from a satellite viewing system? (2) In terms of resolution and contrast, what can be seen from the satellite? (3) Given proper coverage and resolution, what can actually be determined regarding the synoptic weather situation from this information? A current technical report on the satellite proposes several possible flight altitudes between 350 and 500 mi. For the purpose of the present study, however, only the 350-mi altitude was considered to any extent. At this altitude, a vehicle would have an orbital velocity of about 24,870 ft/sec and would make one complete circuit of its orbit in 1.6 hr. Assuming that any regressive motion of the satellite's orbit owing to the spatial motion and oblate shape of the earth is corrected for, and that the area it is desired to observe is in daylight during the vehicle passage for an extended period, this area will be covered and televised in a grid fashion once every 24 hr. It is visualized that, by means of mechanical scanning transverse to the path of the satellite, a continuous strip whose width is equal in order of magnitude to the altitude of the vehicle will be viewed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603908

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE LESSER EVIL,

Personal Author(s):

Davison,W Phillips

Report Date:

28 Mar 1951

Media Count:

1 Page(s)

Report Number(s):

P-194

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The favorable opinion of the Korean population toward United Nations intervention in Korea is discussed. The reasons for Korean support of this intervention are considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603912

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE GAME OF 'GOSSIP' ANALYZED BY THE THEORY OF INFORMATION,

Personal Author(s):

Reich,Edgar

Report Date:

15 Mar 1951

Media Count:

10 Page(s)

Report Number(s):

P-201

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper deals with an analysis of a distributed model of the game of gossip, in which a message is passed through a line of individuals, and the final (in general, garbled) result is compared with the original ungarbled message. The deterioration of information (defined in the sense of Shannon and Wiener) along the line is calculated, and exact as well as asymptotic formulas suggest approximate linear electric network analogues. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603911

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TAXATION AND INCENTIVE IN MOBILIZATION,

Personal Author(s):

Cooper,Gershon

Report Date:

07 Mar 1951

Media Count:

29 Page(s)

Report Number(s):

P-200

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The effects on labor incentive of various possible kinds of change in the income tax structure are examined. It is concluded that an a priori determination is possible in some cases, but not in others. The

implications of these results for fiscal policy in mobilization are then examined briefly. It is concluded that, if 'pay as you go' is deemed inadequate, it must be on other than incentive grounds. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603910

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MODIFICATIONS OF THE RAND REAC,

Personal Author(s):

MELAHN,Wesley S

Report Date:

26 Feb 1951

Media Count:

9 Page(s)

Report Number(s):

P-197

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The major items of the modification program were the installation of a removable plugboard of the type used on the International Business Machines punched card tabulators, and a digital readout device.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604081

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ABSTRACT: PROOFS OF THE LAW OF DIMINISHING RETURNS,

Personal Author(s):

Samuelson,Paul A

Report Date:

23 Feb 1951

Media Count:

3 Page(s)

Report Number(s):

P-292

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Production functions are used to derive deductions concerning returns to proportions and returns in general.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604080

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EXAMPLE IN THE THEORY OF ORGANIZATION,

Personal Author(s):

Newell,Allen

Report Date:

14 Feb 1951

Media Count:

3 Page(s)

Report Number(s):

P-291

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603907

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A FURTHER GENERALIZATION OF THE KAKUTANI FIXED POINT THEOREM, WITH APPLICATION TO NASH EQUILIBRIUM POINTS,

Personal Author(s):

Glicksberg, I L

Report Date:

09 Feb 1951

Media Count:

9 Page(s)

Report Number(s):

P-193

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Kakutani's Fixed Point Theorem states that in Euclidean n-space a closed point to (non-void) convex set map of a convex compact set into itself has a fixed point. Kakutani showed that this implied the minimax theorem for finite games. The object of this note is to point out that Kakutani's theorem may be extended to convex linear topological spaces, and implies the minimax theorem for continuous games with continuous payoff as well as the existence of Nash equilibrium points.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603909

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/603909.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD603909>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PSYCHOLOGICAL WARFARE RECONSIDERED

Personal Author(s):

Speier, Hans

Report Date:

05 Feb 1951

Media Count:

39 Page(s)

Report Number(s):

RAND-P-196

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Approved for public release; distribution is unlimited. Document partially illegible.

Abstract:

(U) The concept of psychological warfare is discussed in terms of its cause and effect upon military and civilian personnel. Aspects considered include the weakening of the will to resist, political ideologies, propaganda, deviant political behavior, policy making, and deception techniques.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422812

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMUM TRAJECTORIES.

Personal Author(s):

Mengel,Arnold S

Report Date:

15 Jan 1951

Media Count:

27 Page(s)

Report Number(s):

P-199

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Microfiche only after original copies exhausted.

Abstract:

(U) The calculus of variations was used to determine (1) What path should a missile with a fixed period of thrust fly to maximize its range at a specified final velocity and altitude, (2) What path should an aircraft fly after take-off to minimize its time of flight to level-flight, combat velocity at a specified altitude. The resulting equations are computationally difficult to handle because of their complexity and quasi-stable nature. Moreover, the new variables introduced by the calculus of variations have no apparent physical meaning, which makes the analysis of their influence difficult. This paper outlines the experiences obtained in solving calculus of variations problems on the REAC. A modified form of the equations (presented as an appendix to this paper) was developed which not only was more satisfactory computationally, but also showed that the calculus of variations equations described the motion of a body similar to the one under study. The nature of the REAC solutions suggested that the steady-state, or mid-path, trajectory and the transient trajectories from the steady-state path to the endpoints could be computed separately. The results using this method agreed well with the exact solution and gave a tremendous savings in computing time. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603800

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME BOUNDED SIGNIFICANCE LEVEL PROPERTIES OF THE EQUAL-TAIL SIGN TEST,

Personal Author(s):

WALSH,John E

Report Date:

03 Jan 1951

Media Count:

14 Page(s)

Report Number(s):

P-13

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The purpose of this paper was to investigate under what generalized conditions the equal-tail sign test for the median is a satisfactory approximation to the corresponding generalized test in the sense that the significance levels are nearly the same. It was found that the significance levels of the two tests are approximately equal for a wide variety of situations if the number of observations is not large. This, from the viewpoint of significance level, the equal-tail sign test for the median is an idealization which represents a sufficiently accurate approximation to the test of interest for many practical cases. This significance level stability, combined with its other favorable properties, suggests that the equal-tail sign test be seriously considered for application whenever the population median is to be tested on the basis of a small number of observations. Corresponding confidence interval properties are also derived.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604777
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON THE SPIN AND THE STRUCTURE OF ELECTRONS,
Personal Author(s):
Bopp,F
Report Date:
Jan 1951
Media Count:
14 Page(s)
Report Number(s):
TT-64 71271
Monitor Series:
64 71271
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
ADA473408
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/a473408.pdf
Size: 3 MB
Handle / proxy Url: <http://handle.dtic.mil/100.2/ADA473408>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) The Operational Code of the Politburo
Descriptive Note:
Monograph
Personal Author(s):

Leites, Nathan

Report Date:

Jan 1951

Media Count:

119 Page(s)

Report Number(s):

RAND/CB-104-1

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) Theoretical frameworks that examine a political actor's personal characteristics and how they affect the foreign policies of their respective states are useful tools for analysts, researchers, and historians. One of the most widely used frameworks has been operational code analysis, introduced by Nathan Leites in this seminal RAND Corporation volume, *The Operational Code of the Politburo*. Originally published by McGraw-Hill in 1951, it was the inaugural publication in what was then called *The RAND Series* and later became known as RAND's commercial books series, a collection of monographs which aimed to make RAND's groundbreaking research available to the public. In that spirit, and to celebrate RAND's 60th Anniversary, RAND is proud to bring this classic work back into print in paperback and digital formats. *The Operational Code of the Politburo* was part of a major effort at RAND to provide insight into the political leadership and foreign policy in the Soviet Union and other communist states; the development of Soviet military strategy and doctrine; and the organization and operation of the Soviet economy. The book presents some of the findings of a still-continuing study of the political strategy of Bolshevism and is based on the writings of Lenin and Stalin. The intention is not to discuss the major theories of Leninism-Stalinism but to discover the rules which Bolsheviks believe to be necessary for effective political conduct. Although a number of these rules can be found through-out Bolshevik literature, many others have only been implied in the political analyses made by Bolsheviks within the last half-century. An attempt has been made to draw explicit and systematic formulations from this wealth of data and to set them down within a meaningful frame of reference. This book deals mainly with the relations between the Party and the outside world rather than with the Party's internal relations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603906

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BOOK REVIEW OF SCHLESINGER'S 'MARX, HIS TIME AND OURS',

Personal Author(s):

Kaplan, Norman

Report Date:

13 Dec 1950

Media Count:

4 Page(s)

Report Number(s):

-190

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A description of the salient features of Marxism, as interpreted by Schlesinger, is presented in the review.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603895

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LUNAR PARALLAX METHOD OF ASTRO NAVIGATION,

Personal Author(s):

THOMPSON, J S

Report Date:

12 Dec 1950

Media Count:

14 Page(s)

Report Number(s):

181

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In considering the problem of the automatic navigation of long-range surface-to-surface missiles it soon becomes evident that the system must be 'unjammable' by the enemy. That is to say, the missile cannot be required to depend on information received on radio channels (of any frequency) to keep on course. Such methods can be easily confused by the enemy's broadcasting spurious signals. A system not subject to such maltreatment that would measure the change in the position of the moon relative to the stars due to the motion of the observer (the missile, in this instance) over the surface of the earth is proposed. The elements which such a system could have are described.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603913

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A FORMAL THEORY OF THE EMPLOYMENT RELATIONSHIP,

Personal Author(s):

Simon,Herbert A

Report Date:

07 Dec 1950

Media Count:

19 Page(s)

Report Number(s):

P-204

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A model was constructed that incorporates rational grounds for the choice by two individuals between an employment contract and a contract of the ordinary kind (which we have called a sales contract). By a generalization of this model one can account for the fact that in an employment contract certain aspects of the workers's behavior are stipulated in the contract terms, certain other aspects are placed within the authority of the employer, and still other aspects are left to the worker's choice. Since administrative theory was interested in explaining behavior within the framework of employment relations, and economic theory in explaining behavior within the area of market relations, the model suggests one possible way of relating these two bodies of theory. The most serious limitations of the model lie in the assumptions of rational utility-maximizing behavior incorporated in it. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA279740

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/a279740.pdf

Size: 1 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/ADA279740>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Structural Weight Analysis, Wing Weight Equations

Personal Author(s):

Micks, W R

Report Date:

Dec 1950

Media Count:

44 Page(s)

Report Number(s):

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422810

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMAL INVENTORY POLICY,

Personal Author(s):

Arrow,Kenneth

Harris,Theodore

Marschak,Jacob

Report Date:

16 Nov 1950

Media Count:

47 Page(s)

Report Number(s):

P189

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603896
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON CERTAIN GAMES WITH TRANSCENDENTAL VALUES,
Personal Author(s):
Gross, Oliver
Report Date:
13 Nov 1950
Media Count:
3 Page(s)
Report Number(s):
P-188
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0422808
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Recurrence Times for the Ehrenfest Model,
Personal Author(s):
Bellman, Richard
Harris, Theodore
Report Date:
08 Nov 1950
Media Count:
25 Page(s)
Report Number(s):
P141-Rev-8
Report Classification:
Unclassified
Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) There is presented a modified scheme of the Ehrenfest model to elucidate certain paradoxes in thermodynamic theory with a continuous time parameter, which was apparently first suggested by A. J. F. Siegert. In this scheme there are two urns and $2N$ balls initially divided between them arbitrarily. Each ball acts, independently of all the others, as follows: there is a probability of $\frac{1}{2} dt + o(dt)$ that the ball changes urns between t and $t + dt$, and a probability of $1 - (\frac{1}{2} dt + o(dt))$ that the ball remains in place between t and $t + dt$. Standard reasoning then shows that the total probability of a change by some ball between t and $t + dt$ is $Ndt + o(dt)$. When a transfer occurs, it is readily seen that the probabilities that it is from urn 1 to urn 2 or from urn 2 to urn 1, respectively, depend on the relative number of balls in the two urns exactly as for the original Ehrenfest model. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603894

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME NON-PARAMETRIC RESULTS FOR EXPERIMENTAL DESIGNS,

Personal Author(s):

Walsh, John E

Report Date:

16 Oct 1950

Media Count:

13 Page(s)

Report Number(s):

P-180

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In experimental designs, the quantities investigated are often grouped into blocks as a method of obtaining a higher precision for the experiment. This grouping may result in high correlation among observations within the same block. Also there may be substantial variance differences between blocks.

Then the t-statistic is not necessarily applicable for comparing the effects of the treatments under investigation. This paper presents some nonparametric results which are usually valid for a well known type of experimental design if there is statistical independence among blocks (number of blocks or =4). These non-parametric results are reasonably efficient, compared to those based on the t-statistic, for the case where the totality of observations are independent, normally distributed, and have the same variance. High precision can sometimes be obtained by designing the experiment to yield large positive correlation within blocks and then using the non-parametric results. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0116555

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE THEORY OF INFORMATION

Personal Author(s):

REICH, EDGAR

Report Date:

20 Sep 1950

Media Count:

47 Page(s)

Report Number(s):

RM-454

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603898

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON APPROXIMATE EXPRESSIONS FOR THE EXPONENTIAL INTEGRAL AND THE ERROR FUNCTION,

Personal Author(s):

Bellman, Richard

Report Date:

19 Sep 1950

Media Count:

11 Page(s)

Report Number(s):

P-175

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603891

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON AN EQUATION OCCURRING IN THE HARMONIC ANALYSIS OF VISCOUS FLUID FLOW,

Personal Author(s):

Bellman, Richard

Report Date:

12 Sep 1950

Media Count:

10 Page(s)

Report Number(s):

P-174

Report Classification:

Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0603890
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON AN INTEGRAL EQUATION,
Personal Author(s):
Bellman, Richard
Latter, Richard
Report Date:
28 Aug 1950
Media Count:
11 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0603887
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOME STATISTICAL PROBLEMS CONNECTED WITH STOCHASTIC PROCESSES,
Personal Author(s):
Anderson, T W
darling, D A

Report Date:

14 Aug 1950

Media Count:

22 Page(s)

Report Number(s):

P-169

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The statistical problem treated is that of testing the hypothesis that a sample of n independent, identically distributed random variables have the common continuous distribution function $F(x)$, specified in advance. In principle such tests will give confidence regions for the unknown distribution function, for if we have a test (based on the n observations) for every $F(x)$ the confidence region will consist of those $F(x)$ for which the corresponding hypotheses are not rejected. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603889

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/603889.pdf

Size: 506 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD603889>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TWO PERSON COOPERATIVE GAMES

Personal Author(s):

Nash, John

Report Date:

09 Aug 1950

Media Count:

13 Page(s)

Report Number(s):

P-172

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The concept of a general two-person cooperative game is defined and a concept of a solution for such games is developed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603846

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A LARGE SAMPLE T-STATISTIC WHICH IS INSENSITIVE TO NON-RANDOMNESS,

Personal Author(s):

Walsh,John E

Report Date:

08 Aug 1950

Media Count:

10 Page(s)

Report Number(s):

P-129

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Most of the well known significance tests and confidence intervals for the population mean are based on the assumption of a random sample. This paper considers how the significance levels and

confidence coefficients of the commonly used class of tests and intervals based on the standard Student t-statistic are changed when the random sample requirement is violated and the number of observations is large. It is found that even a slight deviation from the random sample situation can result in a substantial significance level and confidence coefficient change. Thus this class of tests and confidence intervals would seem to be of questionable practical value for large sets of observations. Large sample tests and confidence intervals for the mean which are not sensitive to the random sample requirement are obtained for a situation of practical interest by development of a special type of t-statistic. These results are as efficient (asymptotically) as those based on the standard t-statistic for the case of a random sample. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603875

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME TEST FOR COMPARING PERCENTAGE POINTS OF TWO ARBITRARY CONTINUOUS POPULATIONS,

Personal Author(s):

MARSHALL,A W

Walsh,John E

Report Date:

02 Aug 1950

Media Count:

14 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Samples are considered from two continuous populations, the first with unique $100\alpha\%$ point θ_{α} , the second with unique $100\beta\%$ point ϕ_{β} . The two populations are not necessarily the same or even related. This paper presents some easily applied significance tests for $\theta_{\alpha} - \phi_{\beta}$ which are approximately valid for moderate and large sized samples. The exact significance level of a test is not known but its value is determined within reasonably close limits.

Efficiency properties of these tests are investigated for the special case of normal populations with known ratio of variances. The tests are found to be reasonably efficient if alpha and beta are not too large or too small. Since these tests are often valid for moderate as well as large sized samples, they may be of practical value. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422809

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON GAMES INVOLVING BLUFFING,

Personal Author(s):

Bellman,Richard

Blackwell,David

Report Date:

01 Aug 1950

Media Count:

32 Page(s)

Report Number(s):

P168

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A class of two-person games possessing the following general characteristics are considered (a) At the beginning of the game, and at various stages of the game, a chance mechanism furnishes numbers x_i and y_i from the unit interval $(0,1)$ to the two players, I and II respectively. I knows x_i but not y_i , II knows y_i but not x_i . (b) Each player pays a certain amount to start the game, regardless of his subsequent moves. (c) The game is a many-move game of the following type. I's initial move, is one of a fixed number of possible moves, which are known to II. However II does not know I's move. (d) After I has made the initial move, II has a choice of a finite number of moves, known to II, and so on. The initial maneuvering continues in this fashion for a fixed number of turns. The game continues in this way for a fixed number of phases, N , at the end of which there is a payoff to I of K and II receives $-K$. The problem

of determining the best possible mode of play for each player in the usual sense of maximizing or minimizing the expectation is one that arises in many important applications of statistics and probability theory. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603888

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLITBURO IMAGES OF STALIN,

Personal Author(s):

Leites,Nathan

Garthoff,Raymond

Bernaut,Elsa

Report Date:

31 Jul 1950

Media Count:

51 Page(s)

Report Number(s):

171

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The report is a study of statements about Stalin made by Politburo members on the occasion of his 70th birthday (December 21, 1949) and on the occasion of the elections to the Supreme Soviet (March 12, 1950).

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604201

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MILITARY DEMONSTRATION AND DISCLOSURE OF NEW WEAPONS,

Personal Author(s):

Brodie, Bernard

Report Date:

21 Jul 1950

Media Count:

26 Page(s)

Report Number(s):

P-372

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is concerned with the continuous conflict, which occasionally poses a specific problem of decision, between the legitimate ends of security in military technology and of disclosure for the sake of demonstration potential. The needs of security may conflict with many other desirable ends as well (e.g., accelerating the rate of scientific progress), but such considerations are ruled out of the present discussion except in so far as they may be supplementary to the considerations governing the decision to disclose for the sake of demonstration value, or to refrain from so doing.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603805

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE THEORY OF AGE-DEPENDENT STOCHASTIC BRANCHING PROCESSES,

Personal Author(s):

Bellman, Richard

Harris, Theodore

Report Date:

14 Jul 1950

Media Count:

47 Page(s)

Report Number(s):

P-38

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The following problem which is of possible biological, chemical and physical interest is investigated. A particle existing at time $t = 0$ is assumed to have probabilities q_n , of being transformed into n similar particles at some random time t . Assume that a start is made with a single particle at $t = 0$. Under the hypothesis that any particle has a life-length probability distribution independent of its time of birth and of the number of other particles existing at this time, the problem is to determine the probability distribution of $Z(t)$, the number of particles in existence at time t . The problem is restricted as far as detailed exposition goes, to the special case where only binary transformations occur; that is, one particle can be transformed only into two others. This is the most important case biologically, and the methods employed to deal with this case are easily extended to deal with the general case with n -ary transformations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603885

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CAPACITANCE OF CIRCULAR CONDENSER,

Personal Author(s):

REICH, E

Report Date:
14 Jul 1950
Media Count:
5 Page(s)
Report Number(s):
-163
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0604790
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOLUTION OF A GAME WITH CONSTRAINTS,
Personal Author(s):
Wagner,R
Report Date:
30 Jun 1950
Media Count:
18 Page(s)
Report Number(s):
RM-414
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603884

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXPECTATIONS, POSITIVE TRANSFORMATIONS AND TAUBERIAN THEOREMS,

Personal Author(s):

Bellman, Richard

harris, Theodore E

Report Date:

20 Jun 1950

Media Count:

28 Page(s)

Report Number(s):

P-158

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603882

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME BOUNDED SIGNIFICANCE LEVEL TESTS FOR THE MEDIAN,

Personal Author(s):

Walsh, John

Report Date:

16 Jun 1950

Media Count:

12 Page(s)

Report Number(s):

P-156

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In practice it is often permissible to assume that the observations of a set are statistically independent and from continuous populations with a common median. Then the population median can be investigated by using the sign test. For small numbers of observations, however, the sign test does not furnish very many suitable significance levels. Also, some of the sign tests with suitable significance levels are not very efficient. The note presents some tests whose significance levels are only approximate but cover a wide range of suitable values. The significance levels of these tests are exactly determined if the populations are symmetrical; they are bounded otherwise. Some of these bounded significance level tests have high efficiencies. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603880

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME MATHEMATICAL MODELS FOR BRANCHING PROCESSES,

Personal Author(s):

HARRIS,T E

Report Date:

14 Jun 1950

Media Count:

54 Page(s)

Report Number(s):

P-152

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper considers a number of stochastic processes which have been used as models for branching phenomena. Particular concern was given to limiting theorems and limiting distributions giving the behavior of the systems studied after long periods of time. One pattern recurs often enough

to make the following statement plausible, although a general mathematical formulation has not been given.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0116554

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/116554.pdf

Size: 709 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD116554>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Average Percent of Target Area Covered.

Descriptive Note:

Research memo.,

Personal Author(s):

Mood, A M

Report Date:

08 Jun 1950

Media Count:

16 Page(s)

Report Number(s):

RAND/RM-404

XC-USAF

Contract Number:

AF33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for Public Release; Distribution Unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603883

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCATTERING AND ABSORPTION OF GAMMA RAYS,

Personal Author(s):

Plesset,M S

Cohen,S T

Report Date:

01 Jun 1950

Media Count:

42 Page(s)

Report Number(s):

P-157

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A formulation is presented of the scattering and absorption of gamma rays in different materials. The range of gamma ray energies considered is from 1 to 10 m(c squared). Results are given for the transmission of gamma rays through air and lead. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603881

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ITERATIVE METHOD OF SOLVING A GAME,

Personal Author(s):

Robinson,Julia

Report Date:

01 Jun 1950

Media Count:

10 Page(s)

Report Number(s):

P-154

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the paper, demonstration is made of the validity of an iterative procedure suggested by George W. Brown for a two-person game. This method corresponds to each player choosing in turn the best pure strategy against the accumulated mixed strategy of his opponent up to then.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603843

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE AMERICAN SOLDIER AND THE SOCIOLOGY OF MILITARY ORGANIZATION,

Personal Author(s):

Speier,Hans

Report Date:

09 May 1950

Media Count:

39 Page(s)

Report Number(s):

P-119

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is limited to a discussion of four questions: (1) What place do these volumes occupy in the history of the sociology of war and military organizations (2) What lessons can be learned from 'The American Soldier' about the moral fabric of American society and about the personal commitment of Americans to national causes (3) 'The American Soldier' contains many challenges to peacetime social research. One of these challenges is singled out for brief comment and the leads which the work gives to studies in the field of sociology of knowledge is discussed. (4) Many readers of 'The American Soldier' will have wondered, what is, or what can be, the relationship between policy making and attitude research. A few observations on this question are offered. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603879

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TOTALITARIAN COMMUNICATIONS AS A MEANS OF CONTROL. A NOTE ON THE SOCIOLOGY OF PROPAGANDA,

Personal Author(s):

Kecskemeti,Paul

Report Date:

04 May 1950

Media Count:

13 Page(s)

Report Number(s):

P-150

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Although a public opinion as we understand it cannot exist in totalitarian states, its place is taken by an official image of the world expressed through the media of mass communications. The individual may not accept this image as true, and indeed often tries to look beyond it, since he sees it as an effort of the bureaucracy to control him. Nevertheless, he usually is forced to accept it, partly for want of something better and partly because of the power he knows stands behind it. For in the totalitarian state both safety and advancement depend upon conformity, and the mass media provide the model with which to conform. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603878

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GAMMA-RAY TRANSMISSION,

Personal Author(s):

Latter,R

Report Date:

27 Apr 1950

Media Count:

12 Page(s)

Report Number(s):

P-147

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An approximate equation for the transmission of gamma rays through a slab of finite thickness is derived. This equation is an immediate generalization of Bethe's onedimensional equation. While Bethe's equation is valid only for the case of a slab in which the absorption coefficient of the gamma rays varies monotonely with energy, the equation discussed here is not so limited though it possesses other limitations. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603877

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLUTIONS OF GAMES BY DIFFERENTIAL EQUATIONS,

Personal Author(s):

Brown,G W

von Neumann,J

Report Date:

19 Apr 1950

Media Count:

12 Page(s)

Report Number(s):

P-142

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A new proof for the existence of a value and of good strategies for a zero-sum two-person game is given. This proof seems to have some interest because of two distinguishing traits: (a) although the theorem to be proved is of an algebraical nature, a very simple proof obtains by analytical means; and (b) the proof is constructive in a sense that lends itself to utilization when actually computing the solutions of specific games. The procedure could be mechanized with relative ease, both for digital and for analogy methods. In the latter case it is probably much less sensitive to the precision of the equipment, than the somewhat related problem of linear equation solving or matrix inversion. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603829

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIFT ON INCLINED BODIES OF REVOLUTION IN HYPERSONIC FLOW,

Personal Author(s):

Grimminger,G

Williams,E P

Young,G

Report Date:

17 Apr 1950

Media Count:

33 Page(s)

Report Number(s):

P-87

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The importance of body lift lies in the fact that at moderate angles of attack and high Mach number it can constitute an appreciable part of the total lift of a winged missile. In this paper an attempt has been made to analyze body lift in hypersonic flow by an approximate method and, together with a correlation of existing experimental data, to indicate the probable variation of body lift over a wide range of Mach number extending from low supersonic to hypersonic. The method of analysis of hypersonic flow over inclined bodies of revolution employed herein has been denoted as the hypersonic approximation. It is an improvement on the Newtonian corpuscular theory of aerodynamics since it considers the centrifugal forces resulting from the curved paths of the air particles in addition to the impact (Newtonian) forces. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603876

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A THEOREM OF DOOB,

Personal Author(s):

HARRIS,T E

Report Date:

17 Apr 1950

Media Count:

10 Page(s)

Report Number(s):

P-139

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This note gives a justification for the interchange of limiting processes required in Doob's 'heuristic' approach to the Kolmogorov limiting distribution of the maximum deviation between a theoretical and an empirical distribution function. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607677

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELEMENTARY THEORY OF CONVEX POLYHEDRONS,

Personal Author(s):

VON Weyl,H

Report Date:

17 Apr 1950

Media Count:

28 Page(s)

Report Number(s):

T-19

TT-64 71629

Monitor Series:

64 71629

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603834

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLYNOMIAL GAMES,

Personal Author(s):

Dresher,M

Karlin,S

Shapley,L S

Report Date:

13 Apr 1950

Media Count:

29 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A basis is laid in this paper for a theory of two-person zero-sum games in which the payoff is a polynomial function $P(x,y)$ of the two strategy variables x and y , the latter taking their values from closed, one-dimensional intervals.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603873

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CLASS OF INTEGRAL EQUATIONS,

Personal Author(s):

Latter, Richard

Report Date:

01 Mar 1950

Media Count:

9 Page(s)

Report Number(s):

P-130

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Solutions for three types of integral equations were found by application of the Wiener-Hopf technique.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0112382

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A GENERAL PROBLEM IN THE CALCULUS OF VARIATIONS WITH APPLICATIONS TO PATHS OF LEAST TIME

Personal Author(s):
HESTENES, M R
Report Date:
01 Mar 1950
Media Count:
45 Page(s)
Report Number(s):
RM-100
Contract Number:
AF 33(038)6413
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0603814
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOME NON-PARAMETRIC TESTS OF WHETHER THE LARGEST OBSERVATIONS OF A SET ARE TOO
LARGE OR TO SMALL,
Personal Author(s):
Walsh,John E
Report Date:
27 Feb 1950
Media Count:
1 Page(s)
Report Number(s):
P-61
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Abstract:

(U) Considered is a large number n of observations which are statistically independent and drawn from continuous symmetrical populations. This paper presents some nonparametric tests of whether the r largest observations of the set are too large to be consistent with the hypothesis that these populations have a common median value. Tests of whether the r largest observations are too small to be consistent with this hypothesis are also considered. Here r is a given integer which is dependent of n . Subject to some weak restrictions, it is shown that the significance level of a test of the type presented tends to a value α as n increases. For no admissible value of n , however, does the significance level of this test exceed 2α . If whether the largest observations are too large is considered, tests with values of α suitable for significance levels can be obtained for $r \geq 4$. Values of α suitable for significance levels can be obtained for any value of r if whether the largest observations are too small is investigated (n large).

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603819

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME ESTIMATES AND TESTS BASED ON THE r SMALLEST VALUES IN A SAMPLE,

Personal Author(s):

WALSH, John E

Report Date:

24 Feb 1950

Media Count:

6 Page(s)

Report Number(s):

P-65

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A situation where only the r smallest values of a sample of size n are available is considered. This paper investigates the case where n is large and r is of the form $pn + O(\sqrt{n})$. Properties of some well known estimates and tests of the 100p% population point (based on statistics of the type used for the sign test) are investigated. If the sample is from a normal population, these non-parametric

results have high efficiencies for small values of p (at least 95% if p or $= 1/10$). Asymptotically 'best' estimates and tests of the population percentage points are derived for the case where the population variance is known. The results of the paper have application in the field of life testing.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA800003

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Reliability of Progress Curves in Airframe Production. Revision 3,

Personal Author(s):

Alchain, Armen

Report Date:

03 Feb 1950

Media Count:

30 Page(s)

Report Number(s):

RAND/RM-260-1

XD-XD

Contract Number:

AF 33(038)6413

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603845

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RUSSIAN LABOR PRODUCTIVITY STATISTICS,

Personal Author(s):

Galenson,Walter

Report Date:

17 Jan 1950

Media Count:

33 Page(s)

Report Number(s):

P-126

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper has a threefold purpose: (a) to examine the concepts employed by Russian statisticians in computing labor productivity; (b) to indicate the trend of labor productivity in Russian industry since the inception of the five year plans; and (c) through study of productivity changes in a particular industry, in this case coal mining, to point up some of the problems involved in the analysis of Russian productivity statistics.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603844

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THEORY OF BLIND NAVIGATION BY DYNAMICAL MEASUREMENTS,

Personal Author(s):

GILVARRY,J J

Browne,S H

Williams,I K

Report Date:

29 Dec 1949

Media Count:

33 Page(s)

Report Number(s):

P-121

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper discusses the theory of blind navigation by means of dynamical measurements (measurements of forces or accelerations) made on a proof body in a reference frame internal to a vehicle. Instrumentally, such measurements are made by an accelerometer in a reference frame provided by gyroscopic or other means. The differential equation is considered which determines the position of a vehicle from dynamical measurements of the non-gravitational acceleration b made internally. Three linear approximations to the gravitational field $g(r)$ of the earth, which lead to explicit solutions of this equation, are considered and their limitations are discussed. An interval-wise solution (linear continuation) for trajectories of extended range is described, which is based on such linear approximations and has definite advantages in this application. The theory is applied to the trajectory of the German A10 vehicle.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603842

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTER-REGIONAL COMMODITY EQUILIBRIUM: SOLUTION BY ELECTRIC ANALOGUE,

Personal Author(s):

Enke,Stephen

Report Date:

12 Dec 1949

Media Count:

12 Page(s)

Report Number(s):

-117

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The economic theory of spatially interdependent markets is analyzed. An analogue system is developed which allows one to raise or lower the schedule of supply or demand in any region, or alter the freight cost between any two regions, and quickly read off all the repercussions.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604062

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFICIENT ALLOCATION OF RESOURCES,

Personal Author(s):

KOOPMANS,Tjalling C

Report Date:

07 Dec 1949

Media Count:

21 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422807

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FIRST-ORDER AND SECOND-ORDER THEORY OF SUPERSONIC FLOW PAST BODIES OF REVOLUTION,

Personal Author(s):

Van Dyke, Milton D

Report Date:

Dec 1949

Media Count:

29 Page(s)

Report Number(s):

P125

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Abstract:

(U) Methods are studied for improving the existing perturbation theories of axial and inclined supersonic flow past bodies of revolution. For axial flow, a second-order solution is developed using an iteration procedure based upon the linearized solution. The resulting second-order problem is reduced to an equivalent first-order problem by discovery of a particular solution. The second-order supersonic flow can then be computed with slight modification of the Karman-Moore procedure. For inclined flow, no particular solution of the second-order equation has been discovered. The second-order solution is derived for a cone, and agrees well with the exact solution. The slender-body series expansion of the second-order solution is found to cause large inaccuracies in both the axial and inclined flows. The conclusion that first-order theory predicts the inclined flow no better than slender-body theory is shown to be erroneous. Non-linearity in lift is shown to result primarily from viscous separation of the crossflow along the after portions of the body. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603840

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONCERNING THE EFFECT OF SMALL CORRELATION ON CERTAIN LARGE SAMPLE TESTS AND
CONFIDENCE INTERVALS FOR THE MEAN,

Personal Author(s):

Walsh, John E

Report Date:

17 Nov 1949

Media Count:

8 Page(s)

Report Number(s):

P-112

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Most of the well known significance tests and confidence intervals for the population mean are based on the assumption of a random sample. The paper considers how the significance levels and confidence coefficients of a commonly used class of these tests and intervals are changed when the random sample requirement is violated and the number of observations is large. It is found that the introduction of even a slight amount of correlation can result in a substantial significance level and confidence coefficient change. Thus this class of tests and confidence intervals would seem to be of questionable practical value for large sets of observations. For two types of situations of practical interest, methods are outlined for obtaining large sample tests and confidence intervals for the mean which are not sensitive to the presence of correlation. These results are as efficient (asymptotically) as the tests and intervals they replace and are applicable to the general situation where the observations are not from the same population. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603836

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A GENERALIZATION OF THE BEHRENS-FISHER PROBLEM,

Personal Author(s):

WALSH,John E

Report Date:

16 Nov 1949

Media Count:

12 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper considers a generalization of the BehrensFisher problem which appears to be approximated by many practical situations. A solution is presented for the generalized situation and some efficiency properties of this solution are investigated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293676

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME STATISTICAL PROBLEMS CONNECTED WITH STOCHASTIC PROCESSES

Personal Author(s):

ANDERSON,T W

DARLING,D A

Report Date:

11 Nov 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The statistical problem treated here is that of testing the hypothesis that a sample of n independent, identically distributed random variables have the common continuous distribution function $F(x)$, specified in advance. In principle this will give confidence regions for the unknown distribution function, for if we have a test (based on the n observations) for every $F(x)$, the confidence region will consist of precisely those $F(x)$ for which the corresponding hypotheses are not rejected. For large n certain asymptotic tests are developed which were envisaged by Kolmogoroff, Smirnov, Cramer, and von Mises. The method used here is to reduce the problems down to more or less straightforward considerations in the theory of continuous Gaussian stochastic processes- a reduction developed by Doob, and used by him to give a simplified proof of Kolmogoroff's fundamental result. This note considers somewhat more refined questions which may be of interest to statisticians. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603831

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE POWER FUNCTION OF TESTS OF PERCENTAGE POINTS BASED ON THE NON-CENTRAL T-STATISTIC,

Personal Author(s):

WALSH,John E

Report Date:

08 Nov 1949

Media Count:

4 Page(s)

Report Number(s):

P-91

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The note considers the power function of one-sided tests of the 100 Beta % point of a normal population which are based on the non-central t-statistic. By combining two approximations given by Johnson and Welch, an approximate expression for the power function is obtained which has desirable properties from the viewpoint of power function comparisons. Use of this approximation is illustrated by several examples. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603839

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRODUCTIVITY AND WELFARE IN SOVIET AGRICULTURE,

Personal Author(s):

Kershaw, Joseph A

Report Date:

04 Nov 1949

Media Count:

13 Page(s)

Report Number(s):

P-109

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An examination is made of two theses included in Naum JHasny's volume on Soviet agriculture. The theses are: (1) labor productivity on the farm, in the period 1928 to 1938, increased but slightly on a man-year basis and probably not at all on a man-hour basis; and (2) the welfare of both farm and urban dwellers is no higher at the end than at the beginning of the same period. These developments are used as part of the proof that the socialization of agriculture has not been successful. The ten or eleven years following the beginning of the first Five Year Plan are concentrated upon since it was in these years that the basic economic policies were formulated and carried through.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605790

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MEASUREMENT OF VALUE,

Personal Author(s):

Dalkey,N C

Report Date:

04 Nov 1949

Media Count:

1 Page(s)

Report Number(s):

P-110A

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The fundamental contemporary issue in the theory of value is the objectivity of values. Since the notion of value is basically quantitative this issue comes down to the question: are values measurable. Von Neumann and Morgenstern in their book Theory of Games and Economic Behavior have suggested an ingenious yardstick, namely the comparison of goods with probability combinations. They have demonstrated that such comparisons allow the construction of a numerical scale for values which is unique except for the choice of zero point and an arbitrary scale factor. This theory is discussed from a critical point of view.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603821

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ITERATES OF FRACTIONAL ORDER,

Personal Author(s):

Isaacs,Rufus

Report Date:

03 Nov 1949

Media Count:

13 Page(s)

Report Number(s):

P-73

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper is concerned with the following question: Let E be any space whatever. $g(x)$ is a function mapping E into E . When does there exist a function $f(x)$, of the same type, such that $f(f(x)) = g(x)$.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0267693

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETERMINATION OF EXPECTED COVERAGE AND OF EXPECTED DAMAGE, SINGLE BOMB OF LARGE LETHAL AREA

Personal Author(s):

GERMOND,H H

Report Date:

28 Oct 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603828

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LARGE SAMPLE TESTS AND CONFIDENCE INTERVALS FOR MORTALITY RATES,

Personal Author(s):

WALSH,John E

Report Date:

24 Oct 1949

Media Count:

12 Page(s)

Report Number(s):

P-86

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In computing mortality rates from insurance data, the unit of measurement used is frequently based on number of policies or amount of insurance rather than on lives. Then the death of one person may result in several units of 'death' with respect to the investigation; moreover, the number of units per individual may vary noticeably. Thus the usual large sample methods of obtaining significance tests and confidence intervals for the true value of the mortality rate are not applicable to these situations. If the number of units associated with each person in the investigation were known, accurate large sample results could be obtained; however, determination of the number of units associated with each individual would require an extremely large amount of work. The article presents some valid large sample tests and confidence intervals for the mortality rate which do not require much work and are reasonably efficient. More general situations are also considered. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604798

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN AIRFRAME PRODUCTION FUNCTION,

Personal Author(s):

Alchian,Armen

Report Date:

20 Oct 1949

Media Count:

18 Page(s)

Report Number(s):

P-108

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0102897

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CLIMB PATH FOR LEAST ELAPSED TIME

Personal Author(s):

PETERSON, N C

Report Date:

07 Oct 1949

Media Count:

13 Page(s)

Report Number(s):

RM-245

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

DISTRIBUTION STATEMENT A: Approved for Public Release;Distribution Unlimited

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603824

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON THE SOLUTION OF LINEAR SYSTEMS INVOLVING INEQUALITIES,

Personal Author(s):

Brown,George W

Report Date:

03 Oct 1949

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The problem of minimizing a linear function is considered.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0102896

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A STUDY TO DETERMINE THE FLIGHT PATHS WHICH REQUIRE MINIMUM TIME AND MINIMUM FUEL FOR A TYPICAL PRESENT DAY INTERCEPTOR.

Personal Author(s):

KIRKWOOD, T F

Report Date:

15 Sep 1949

Media Count:

16 Page(s)

Report Number(s):

RM-246

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603874

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON GAMES OF TIMING,

Personal Author(s):

Shiffman,Max

Report Date:

06 Sep 1949

Media Count:

39 Page(s)

Report Number(s):

P-131

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0662593

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON THE MONTE CARLO METHOD AND THE POTENTIAL EQUATION,

Personal Author(s):

Bellman,R

Report Date:

01 Sep 1949

Media Count:

5 Page(s)

Report Number(s):

RM-234

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In connection with the seminar on stochastic processes held jointly with RAND and the Institute for Numerical Analysis, it is perhaps of interest to mention some recent work initiated by Doetsch which presents the possibility of applying the Monte Carlo method to the numerical solution of the potential equation. The fundamental idea, and one which seems susceptible of great generalization, is that of forming a solution of one class of equations using solutions of another class. Thus, in particular, solutions of the potential equation are formed from those of the heat equation. Expressed in this

general form, this method connects closely with the work of Bergmann, who has used the solutions of the potential equation to obtain solutions of more general classes of equations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0101288

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AIR BATTLE THEORY: STATISTICAL SURVIVAL ANALYSIS FOR CLOSE CONTROLLED INTERCEPTORS
VERSUS BOMBERS

Personal Author(s):

GOMPF, G E

Report Date:

29 Aug 1949

Media Count:

7 Page(s)

Report Number(s):

RM-239

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0224572

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BASIC SURVIVAL PROBABILITY EXPRESSIONS FOR AIR COMBAT MODELS,

Personal Author(s):

Gompf, G E

Report Date:

22 Aug 1949

Media Count:

4 Page(s)

Report Number(s):

RM240

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603833

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FUTURE OF MATHEMATICAL STATISTICS AND QUALITY CONTROL,

Personal Author(s):

Brown,George W

Report Date:

18 Aug 1949

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discusses a few specific areas of activity in mathematical statistics, illustrating the type of applications presently possible and sketching some of the implications for the future.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0293681

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPILATION OF PHYSICAL AND CHEMICAL DATA PERTAINING TO SELF-IGNITING FUELS FOR
RAMJET PROPULSION

Personal Author(s):

CLAEYS,YVONNE M

Report Date:

15 Aug 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This compilation comprises 147 chemical compounds which, because of their low activation energies, relatively high heats of combustion and flame stabilities, may be particularly useful in ramjet engines either as fuels or as fuel additives whose purpose is to promote continuous combustion without forced ignition. The compounds are divided into seven arbitrary groups as follows: boron compounds, inorganic compounds, miscellaneous hydrides, organo-metallic compounds, phosphorus compounds, and silicon compounds. Besides the usual physical and thermodynamic properties there are listed, wherever possible, such properties as activation energy, ignition temperature, ignition lag, reactivity in air, and reactivity in hydrocarbons. Observed data for these compounds are far from complete and no specific recommendations are made. Acceptance of any particular substance is subject to exhaustive tests which simulate actual ramjet service conditions. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603820

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GAMES WITH CONTINUOUS, CONVEX PAY-OFF,

Personal Author(s):

Bohnenblust,H F

Karlin,S

Shapley,L S

Report Date:

12 Aug 1949

Media Count:

20 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the 'normal form' of a two-person, zero-sum game, as the theory has been set forth by von Neumann, there are just two moves. They are the choices of strategy, made simultaneously by each player. One player is then required to pay to the other an amount (positive or negative) determined by the pay-off function, which is a function only of the strategy-choices. The theory is best known at present for games in which the number of strategies available to each player is finite. This paper will explore a rather special class of games in which the strategies of one player form a compact and convex region B of finite-dimensional Euclidean space, while those of the other form an arbitrary set A. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA800000

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:
(U) Solutions of a Special Reconnaissance Game.
Descriptive Note:
Research memo.,
Personal Author(s):
Belzer, R L
Report Date:
10 Aug 1949
Media Count:
23 Page(s)
Report Number(s):
RAND/RM-203
XD-XD
Monitor Series:
XD
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0603838
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) TOTAL RECONNAISSANCE WITH TOTAL COUNTERMEASURES: SIMPLIFIED MODEL,
Personal Author(s):
Sherman,Seymour
Report Date:
05 Aug 1949
Media Count:
3 Page(s)
Report Number(s):
P-106
Report Classification:
Unclassified

Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603832

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME COMMENTS ON THE EFFICIENCY OF SIGNIFICANCE TESTS,

Personal Author(s):

Walsh,John E

Report Date:

29 Jul 1949

Media Count:

11 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper investigates the power function implications of the estimate method of defining the efficiency of a test for several special cases where uniformly most powerful tests exist.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603837

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METHODS OF SOLUTION IN GAME THEORY,

Personal Author(s):

Dresher, Melvin

Report Date:

29 Jul 1949

Media Count:

3 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

ADA800001

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A Bomber Fighter Duel (II).

Descriptive Note:

Research memo.,

Personal Author(s):

Blackwell, David

Shiffman, Max

Report Date:

25 Jul 1949

Media Count:

9 Page(s)

Report Number(s):

RAND/RM-193

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603826

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME TWO-PERSON GAMES INVOLVING BLUFFING,

Personal Author(s):

Bellman, Richard

blackwell, David

Report Date:

19 Jul 1949

Media Count:

11 Page(s)

Report Number(s):

P-84

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A systematic theoretical treatment of a two-person zerosum poker game is presented.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603830

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STOCHASTIC (MONTE CARLO) ATTENUATION ANALYSIS,

Personal Author(s):

Kahn,H

Report Date:

14 Jul 1949

Media Count:

21 Page(s)

Report Number(s):

-88

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Applications of random sampling methods to neutron attenuation problems that would be useful to engineers and physicists having but a slight knowledge of statistics are given. The discussion concerns the application of random sampling techniques to the problem of neutron and gamma ray attenuation in thick shields. In such an analysis, deductions about the behavior of a large number of neutrons are made from a study of comparatively few. The technique is quite analogous to public opinion polling of a small sample to get information concerning the population of the entire country.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603835

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRANSTABILITY FLUTTER OF SUPERSONIC AIRCRAFT PANELS,

Personal Author(s):

ISAACS,R P

Report Date:

01 Jul 1949

Media Count:

15 Page(s)

Report Number(s):

101

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A beam is clamped at the ends. The ends have been forced toward one another before clamping so that the beam is buckled slightly. One face of the beam is exposed to a supersonic air stream flowing parallel to the beam whose effect is a pressure negatively proportional to the inclination of the beam. The practical prototype of this model which was used to study transtability flutter is a panel in the structure of a supersonic aircraft.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603825

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE POWER FUNCTION OF THE 'BEST' T-TEST SOLUTION OF THE BEHRENS-FISHER PROBLEM,

Personal Author(s):

WALSH,John E

Report Date:

20 Jun 1949

Media Count:

4 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Behrens-Fisher problem is concerned with significance tests for the difference of the means of two normal populations when the ratio of the variances of the populations is unknown.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603841

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HISTORY OF RAND'S RANDOM DIGITS, SUMMARY,

Personal Author(s):

Brown, George W

Report Date:

Jun 1949

Media Count:

6 Page(s)

Report Number(s):

P-113

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Experimental probability problems, in connection with a diversity of applications, led to a desire for a large supply of random digits, of sufficiently high quality so that the user wouldn't have to question whether they were good enough for his particular application in the case of every different application. A random frequency pulse source was gated by a constant frequency pulse, about once a second, providing on the average about 100,000 pulses in one second. Pulse standardization circuits passed the pulses to a five place binary counter, so that in principle the machine is like a roulette wheel with 32 positions, making on the average about 3000 revolutions on each turn. A binary to decimal conversion was used, throwing away 12 of the 32 positions, and the resulting random digit was fed to an I. B. M. punch, yielding punched card tables of random digits. A detailed analysis of the randomness to be expected from such a machine was made by the designers and indicated that the machine should yield very high quality output. (Author)

Abstract Classification:

Unclassified

Citation Format: FOIA(U2)

Accession Number:

AD0603827

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A THEOREM OF VILLE,

Personal Author(s):

Bohnenblust,H F

Karlin,S

Report Date:

27 May 1949

Media Count:

9 Page(s)

Report Number(s):

P-85

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Among the several procedures which lead to the existence of the value of a discrete two persons, zero sum game one is based on a theorem of Ville and another one is based on a fix point theorem of Kakutani. In the present paper these two theorems are extended under certain conditions to infinite dimensional spaces. The results are useful tools in the theory of non-discrete games.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603823

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/603823.pdf

Size: 381 KB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD603823>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME NOTES ON COMPUTATION OF GAMES SOLUTIONS

Personal Author(s):

Brown, George W

Report Date:

25 Apr 1949

Media Count:

9 Page(s)

Report Number(s):

RAND-P-78

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Abstract:

(U) This paper presents some dynamical systems whose steady state solutions yield solutions to a discrete game matrix. First a few systems of differential equations for the case of a symmetric game, then some more or less related systems of difference equations for digital computation are considered. Finally, a representation of the linear programming problem as a symmetric game is given. This representation serves also to represent asymmetric games in symmetric form.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603822

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME APPLICATIONS OF A THEOREM ON CONVEX FUNCTIONS,

Personal Author(s):

Karlin,S

Shapley,L S

Report Date:

18 Apr 1949

Media Count:

10 Page(s)

Report Number(s):

-74

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper presents several applications of the theory developed elsewhere (AD-603 820). The results established here depend upon a fundamental theorem on convex functions, previously used in relation to the Theory of Games. Certain extensions of Helly's theorem, approximation and fitting results, and covering theorems for the n dimensional unit sphere are obtained. All these are intrinsically connected with one another. The authors believe they possess independent interest. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0422805

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PREDICTION OF SOCIAL AND TECHNOLOGICAL EVENTS,

Personal Author(s):

Kaplan,A

Skogstad,A

Girshick,M A

Report Date:

01 Apr 1949

Media Count:

29 Page(s)

Report Number(s):

P93

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Availability: Reference only.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607580

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME QUESTIONS OF AERODYNAMIC DAMPING AND DYNAMIC STABILITY.

Descriptive Note:

Preliminary repts. 1-2,

Personal Author(s):

Heyeby,W

Report Date:

23 Mar 1949

Media Count:

15 Page(s)

Report Number(s):

T-16

TT-64 71611

Monitor Series:

64 71611

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A discussion is presented on the damping of guided missile oscillations by the surrounding air; a similarity theorem is given for damping. Dynamic stability is briefly discussed.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607579

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME PROBLEMS OF FLOW, HEAT TRANSFER, AND DIFFUSION IN THE LAMINAR FLOW ALONG A FLAT PLATE,

Personal Author(s):

Schuh,H

Report Date:

20 Feb 1949

Media Count:

24 Page(s)

Report Number(s):

T-15

TT-64 71610

Monitor Series:

64 71610

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Following closely E. Polhausen's solution for the laminar temperature field at the flat plate in longitudinal flow, formulas are derived which permit calculation of the velocity and temperature field for variable properties by means of an integral equation and an iteration method based on this equation. Accordingly, the following cases were solved: By assuming that only viscosity varies with temperature and that the remaining properties are constant, the velocity and temperature fields were calculated for the Pr numbers 12.5 and 100 (viscous fluids) at heated and cooled plate conditions.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605966

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/605966.pdf

Size: 2 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD605966>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PHYSICAL PROPERTIES AND THERMODYNAMIC FUNCTIONS OF FUELS, OXIDIZERS, AND PRODUCTS OF COMBUSTION. VOLUME 2, OXIDIZERS

Descriptive Note:

Rept. for 1 Oct 1947-15 Nov 1948

Report Date:

Feb 1949

Media Count:

99 Page(s)

Report Number(s):

RAND-R-129

XC-AFBMD

Contract Number:

W-33-038-AC-14105

Monitor Series:

AFBMD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) The physical properties and thermodynamic functions of the following elements and compounds are tabulated: Boron trifluoride, bromine, bromine trifluoride, chlorine, chlorine trifluoride, fluorine, hydrogen peroxide, nitric acid, nitrogen dioxide, nitrogen trifluoride, oxygen, oxygen fluoride, ozone.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603798

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONCERNING COMPOUND RANDOMIZATION IN THE BINARY SYSTEM,

Personal Author(s):

Walsh,John E

Report Date:

21 Jan 1949

Media Count:

12 Page(s)

Report Number(s):

10

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Considered is a set of approximately random binary digits obtained by some experimental process. This paper outlines a method of compounding the digits of this set to obtain a smaller set of binary digits which is much more nearly random. The method presented has the property that the number of digits in the compounded set is a reasonably large fraction (say of the magnitude $1/3$ or $1/4$) of the original number of digits. If a set of very nearly random decimal digits is required, this can be obtained by first finding a set of very nearly random binary digits and then converting these digits to decimal digits. The concept of maximum bias is introduced to measure the degree of randomness of a set of digits. A small maximum bias shows that the set is very nearly random. The question of when a table of approximately random digits can be considered suitable for use as a random digit table is investigated. It is found that a table will be satisfactory for the usual types of situations to which a random digit table is applied if the

reciprocal of the number of digits in the table is noticeably greater than the maximum bias of the table.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603812

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLUTIONS OF DISCRETE, TWO-PERSON GAMES,

Personal Author(s):

Shapley,L S

Karlin,S

Bohnenblust,H F

Report Date:

14 Jan 1949

Media Count:

33 Page(s)

Report Number(s):

P-57

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper proposes to investigate the structure of solutions of discrete, zero-sum, two-person games. For a finite game-matrix it is well known that a solution (i.e., a pair of frequency distributions describing the optimal mixed strategies of the two players) always exists. Moreover, the set of solutions is known to be a convex polyhedron, each of whose vertices corresponds to a submatrix with special properties. In Part I of the paper a fundamental relationship between the dimensions of the sets of optimal strategies is proven, and devote particular attention to the set of games whose solutions are unique. Part II solves the problem of constructing a game-matrix with a given solution. A number of examples and geometrical arguments are interspersed to illustrate the theory, and Part III describes the solutions of some matrices with special diagonal properties.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0605967

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PHYSICAL PROPERTIES AND THERMODYNAMIC FUNCTIONS OF FUELS, OXIDIZERS, AND PRODUCTS OF COMBUSTION. VOLUME I. FUELS.

Descriptive Note:

Rept. for 1 Oct 46-15 Aug 48.

Report Date:

Jan 1949

Media Count:

265 Page(s)

Report Number(s):

RAND-R-127

Contract Number:

W33 038ac14105

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The physical properties and thermodynamic functions of the following elements and compounds are tabulated: acetone, acetylene, aluminum, aluminum borohydride, ammonia, aniline, carbon disulfide, carbon monoxide, cyanogen, cyclopropane, diborane, ethane, ethanol, ethylene, ethyl ether, formaldehyde, hydrazine, hydrogen, lithium, lithium hydride, magnesium, methane, methanol, methylamine, methyl nitrate, monoethylaniline, nitroethane, nitromethane, n-octane, pentaborane, sodium, tetranitromethane, triborinetriamine (borazole), trioxane.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0108425

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/108425.pdf

Size: 11 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD108425>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CONFERENCE ON METHODS FOR STUDYING THE PSYCHOLOGICAL EFFECTS OF UNCONVENTIONAL WEAPONS HELD IN SANTA MONICA, CA ON JANUARY 26-28, 1949

Descriptive Note:

Research memo.

Report Date:

Jan 1949

Media Count:

133 Page(s)

Report Number(s):

RM-120

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603813

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SIMULATION OF COMBUSTION MODELS IN WIND TUNNELS,

Personal Author(s):

Augenstein, Bruno W

Report Date:

27 Dec 1948

Media Count:

7 Page(s)

Report Number(s):

P-60

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) An analysis is given of the extent to which duct flow with burning can be simulated without heat addition in a wind tunnel (i.e., a cold test). (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603809

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ISOMORPHISM OF GAMES, AND STRATEGIC EQUIVALENCE,

Personal Author(s):

MCKinsey, J C C

Report Date:

22 Nov 1948

Media Count:

41 Page(s)

Report Number(s):

P-47

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is concerned with the notion of strategic equivalence in the theory of games. The intuitive notion of strategic equivalence is rather vague; but it nevertheless happens to be sufficiently sharp, that a precise mathematical condition A can be specified, which is intuitively recognized to be necessary for strategic equivalence, and a precise mathematical condition B, which is intuitively recognized to be sufficient. It turns out, however, that B is a consequence of A: so, in actuality, it can be said that A (or B) is a necessary and sufficient condition for strategic equivalence. Attention will be devoted mainly to a detailed proof that A implies B. The paper falls into three sections. In the first section the important notions which will be used are introduced, and some arguments of an intuitive sort are given. In the second section, some lemmas of an algebraic or function theoretic nature which are to be used subsequently are established. The last section contains the theorems which establish the desired relation between A and B. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603808

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME TESTS OF THE RANDOMNESS OF A MILLION DIGITS,

Personal Author(s):

Brown,Bernice

Report Date:

19 Oct 1948

Media Count:

22 Page(s)

Report Number(s):

P-44

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The randomness of a table of a million digits produced by a random digit generator was examined by applying four tests. The four tests were: (1) Frequency test, (2) Poker test, (3) Serial test and (4) Run test. The complete table of a million digits was subjected to the first two tests. The last two tests were applied to a sample of 50,000 digits from the table. All computations were accomplished by means of I. B. M. equipment. There was no evidence of any unusual divergence from the theoretical expectations in any of the tests. It would be difficult to construct a series of digits which would succeed in evading all four of these tests. The examination of the million digits did not reveal any bias. There was nothing to indicate that the digits were not being produced with equal probabilities. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603807

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME BOUNDED SIGNIFICANCE LEVEL TESTS OF WHETHER THE LARGEST OBSERVATIONS OF A SET ARE TOO SMALL.

Descriptive Note:

Preliminary rept.,

Personal Author(s):

Walsh,John E

Report Date:

13 Oct 1948

Media Count:

3 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0762585

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Collection of Articles on the Theory of Firing. I, (Sbornik Statei po Teorii Strelby. I),

Personal Author(s):

Petrovokii, I G

Report Date:

13 Oct 1948

Media Count:

159 Page(s)

Report Number(s):

T-14

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) ;Contents: The number of hits in a given number of shots and general principles of evaluating the effectiveness of a system of firing; Artificial dispersion in the case of destruction with one hit and of dispersion in one dimension; Determination of the best means of introducing artificial dispersion in firing (for various special cases); and Solution of the problem of firing with artificial dispersion for various cases.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603806

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE POSSIBILITY OF A UNIVERSAL SOCIAL WELFARE FUNCTION,

Personal Author(s):

Arrow, Kenneth J

Report Date:

26 Sep 1948

Media Count:

20 Page(s)

Report Number(s):

-41

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Decision theory is applied to the problem of ordering preference behavior; i.e., social decisions.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607676

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROPAGATION OF LONG WAVES AROUND THE EARTH,

Personal Author(s):

ZINKE, O

Report Date:

15 Sep 1948

Media Count:

33 Page(s)

Report Number(s):

T-13

TT-64 71625

Monitor Series:

64 71625

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) For the field strength of electrical, very long waves a relation is derived which is valid especially for long distances up to approximately 20,000 km. As compared with the known Austinian formula, the new field strength formula differs chiefly in 3 points: (a) the functional relationship with distance; (b) the effect of wave length of the damping factor; and (c) the effect of noise at the antipole of the transmitter. With the aid of ionosphere data gained empirically for short wave propagation, this representation is to furnish a clear picture of the propagation of very long waves. At long distances it yields higher field strength values than does the Austinian formula and agrees better with measured values. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603804

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BAYES AND MINIMAX SOLUTIONS OF SEQUENTIAL DECISION PROBLEMS,

Personal Author(s):

Arrow,K J

Blackwell,D

Girshick,M A

Report Date:

30 Aug 1948

Media Count:

60 Page(s)

Report Number(s):

P-37

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603810

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DETERMINATION OF MANY-COMMODITY PREFERENCE SCALES BY TWO-COMMODITY COMPARISONS,

Personal Author(s):

Arrow,K J

Youngs,J W T

Report Date:

03 Aug 1948

Media Count:

23 Page(s)

Report Number(s):

-49

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) It is the purpose of the paper to show that, under the assumptions usually made in economic literature, the determination of a preference scale relating to many commodities can always be accomplished by means of comparisons involving the variation of only two commodities at a time.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603799

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BRANCHING PROCESSES,

Personal Author(s):

Harris,T E

Report Date:

29 Jul 1948

Media Count:

37 Page(s)

Report Number(s):

-14

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper is concerned with a simple mathematical model for a branching stochastic process. Using the language of family trees we may illustrate the process as follows. The probability that a man has exactly r sons is $P_{\text{sub } r}$, $r = 0, 1, 2, \dots$. Each of his sons (who together make up the first generation) has the same probabilities of having a given number of sons of his own; the second generation have again the same probabilities, and so on. Let $Z_{\text{sub } n}$ be the number of individuals in the n th generation. The probability distribution of $Z_{\text{sub } n}$ is studied.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603803

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON THE NUMERICAL PROBLEM OF MATRIX INVERSION,

Personal Author(s):

White,W B

Report Date:

19 Jul 1948

Media Count:

4 Page(s)

Report Number(s):

P-31

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The present method for obtaining the inverse of a matrix is essentially an extension of Crout's method for solving a system of simultaneous linear equations and involves three basic operations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0101882

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/101882.pdf

Size: 5 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD101882>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A STATISTICAL THEORY OF TARGET DETECTION BY PULSED RADAR, MATHEMATICAL APPENDIX

Descriptive Note:

Research memo.

Personal Author(s):

MARCUM, J I

Report Date:

01 Jul 1948

Media Count:

122 Page(s)

Report Number(s):

RM-753

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In a previous report a statistical theory of radar detection was presented in outline form. The mathematical details were omitted. In order that the main ideas and results might be made available as soon as possible. This report contains the mathematics that led to the results presented in Ref. 28. In addition, several subjects are briefly discussed that were not covered in Ref. 28. These are collapsing loss, antenna beam shape loss, the effect of signal injection, limiting loss, and moving target indication.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603802

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DESIGN OF CONSTANT-VOLUME MISSILE FUSELAGES HAVING MINIMUM DRAG AT SUPERSONIC SPEEDS,

Personal Author(s):

GREEN,Alan H

Report Date:

11 Jun 1948

Media Count:

1 Page(s)

Report Number(s):

P-23

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The factors influencing the design of missile fuselages are discussed in relation to the problem of obtaining an optimum design from the drag standpoint. On the basis of the factors and assumptions given, a method is developed for determining the fineness ratio that results in minimum drag for a constant-volume fuselage flying at a fixed angle of attack and Mach number. Using drag data for the attitude of zero angle of attack at Mach numbers between 1.5 and 5, numerical values of optimum fineness ratio are presented for the case of a practical, axially-symmetric fuselage whose shape consists of a conical nose of fixed proportions attached to a cylindrical afterbody. Procedures are indicated for the extension of the results of the study to specific designs of the subject or other geometrical configurations.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603801

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SAMPLING INSPECTION PLANS FOR CONTINUOUS PRODUCTION,

Personal Author(s):

Girshick, M A

Report Date:

10 May 1948

Media Count:

21 Page(s)

Report Number(s):

P-17

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The sampling inspection plans discussed are applicable only to a production process in which the units of product are classified as either defective or nondefective. These plans are designed to set a prescribed upper limit to the average outgoing quality of the final product entering into consumption channels. This is accomplished through a sequential process of partial and complete inspection of the finished product which will be described in detail later. Sampling inspection schemes whose aim is to

improve the outgoing quality of the finished product is not new in the field of industrial quality control. Various methods are in vogue with varying degrees of statistical validity. The first step towards putting the use of sampling inspection for controlling the outgoing quality on a scientific basis was taken by H. F. Dodge and H. G. Romig of the Bell Telephone system. Dodge and Romig made their inspection plan an adjunct to lot-by-lot acceptance inspection. The basic idea involved in their scheme is briefly described.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0267751

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROBABILITY THAT A METEORITE WILL HIT OR PENETRATE A BODY SITUATED IN THE VICINITY OF THE EARTH

Personal Author(s):

GRIMMINGER,G

Report Date:

22 Apr 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604060

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE 'INFORMATION' LOST BY USING T-TEST WHEN THE POPULATION VARIANCE IS KNOWN,

Personal Author(s):

WALSH,John E

Report Date:

25 Mar 1948

Media Count:

9 Page(s)

Report Number(s):

P-8

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper calls attention to the use of the operating characteristic function as a means of determining how much 'information' is lost by using some other test in place of the most powerful test of a given hypothesis. As an example of the method, the case of using a t-test for the mean of a normal population with known variance is analyzed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603795

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLIFIED METHOD FOR COMPUTING THE EQUILIBRIUM COMPOSITION OF GASEOUS SYSTEMS,

Personal Author(s):

Krieger,F J

White,W B

Report Date:

09 Jan 1948

Media Count:

1 Page(s)

Report Number(s):

P-2

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A simplified procedure is described for computing, either manually or by means of punched cards, the equilibrium composition of a gaseous system of any degree of complexity. The method presents a system of n equations in n unknowns in such a form that each of the major components is given as a linear expression of the minor components only, while the logarithm of each of the minor components is given as a linear expression in terms of the free energy change for the dissociation reaction which defines the minor component and the logarithms of the major components and the total pressure. An iteration process then gives an exact solution with a rapidity which decreases as the fuel-oxidant mole ratio approaches the stoichiometric value. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604059

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE POWER FUNCTION OF A SIGN TEST FORMED BY USING SUBSAMPLES,

Personal Author(s):

WALSH,John E

Report Date:

07 Jan 1948

Media Count:

18 Page(s)

Report Number(s):

P-7

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The sign test can be used to obtain significance tests for the population median under extremely general conditions. The purpose of this paper is to investigate the power efficiency of the significance tests for the median formed in this way for the particular case in which each observation is drawn from the same normal population. For the cases considered, it is found that the power efficiency is almost always decreased by using two or more subsets rather than all the observations as a single set; sometimes this decrease in power efficiency is very large. Also, for a given significance level, it is found that the power efficiency can vary noticeably with the manner in which the test is formed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607596

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONES IN SUPERSONIC FLOW,

Personal Author(s):

Hantzsche,W

Wendt,H

Report Date:

05 Jan 1948

Media Count:

47 Page(s)

Report Number(s):

T-8

TT-64 71621

Monitor Series:

64 71621

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) For the treatment of a supersonic flow over a wedge, it is particularly suitable to employ the so-called shock polar diagram which summarizes all velocities appearing in flows with compression shocks. In the corresponding axial case of supersonic flow over cones (which is very important in ballistics), an

adiabatic compression takes place in the conical field extending from the compression shock to the surface of the cone. The velocities appearing in this case on the surface of the cone are found on the line which encloses the shock polars. Let this line be called the Apfel curve, a diagram of which was published recently by Busemann. For an exact analysis of supersonic flows over cones, however, it is necessary to know the curves corresponding to the adiabatic compression which connect the shock polars and the Apfel curves. These curves are presented in the report. They are determined by a graphical-numerical integration of the differential equation of the axially symmetrical conical field in the hodograph for all cone angles and for all free-stream velocities. The pressures on the surface of the cone thus obtained are represented in diagrams and compared with the two-dimensional case.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0101287

Full Text (pdf) Availability:

View Full Text (pdf)

File: /U2/101287.pdf

Size: 3 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD101287>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A STATISTICAL THEORY OF TARGET DETECTION BY PULSED RADAR

Personal Author(s):

MARCUM, J I

Report Date:

01 Dec 1947

Media Count:

89 Page(s)

Report Number(s):

RM-754

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0606207

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPROXIMATION OF EMPIRICAL FUNCTIONS OF DISCRETE DISTRIBUTION BY DISCONTINUOUS
ORTHOGONAL POLYNOMIALS,

Personal Author(s):

Vettin,

Report Date:

26 Nov 1947

Media Count:

2 Page(s)

Report Number(s):

T-7

TT-64 71446

Monitor Series:

64 71446

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Compensation of empirical functions by whole rational functions according to the Gaussian method of least squares leads to systems of linear equations the solution of which, at large numbers of given functional values, becomes very difficult, and becomes numerically impossible with increasing number of values. Application of orthogonal polynomials developed in this paper eliminates the solution of these systems of equation, and by means of these orthogonal polynomials whole rational functions can be

given rapidly which approximate with any desired degree of accuracy the given functional values, and which in the limiting case, yield the exact interpolation. By means of an example ($N = 75$) application of this method is demonstrated. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604783

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE LAMINAR BOUNDARY LAYER ON A CONE IN A SUPERSONIC AIR STREAM AT ZERO ANGLE OF ATTACK,

Personal Author(s):

Hantzsche,W

Wendt,H

Report Date:

13 Nov 1947

Media Count:

8 Page(s)

Report Number(s):

T-6

TT-64-71277

Monitor Series:

64-71277

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This report demonstrates that the integration of the equations for the laminar boundary layer on a cone in a supersonic air stream can be reduced to the equations for the flat plate. The simple result is obtained, that on the cone the boundary layer is different by $1/\text{square root of } 3$ as compared to the plate. The mean friction coefficient and the heat transfer coefficient are greater by the factor $2/3$ times the square root of 3. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607468

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUIPMENT USED TO DETERMINE THE EFFECT OF SOUND AND OSCILLATIONS ON THE HUMAN BODY,

Personal Author(s):

Coermann,R

Report Date:

03 Nov 1947

Media Count:

22 Page(s)

Report Number(s):

T-5

TT-64 71598

Monitor Series:

64 71598

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) This paper comprises a description of test equipment with the aid of which vibrations having a frequency range from 30 to 1000c/sec, and with amplitudes up to 2mm can be transmitted to a human body. Reasons are given for the designs selected and construction difficulties are pointed out. The different oscillators are enumerated and their mode of operation is explained. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0603797

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A NEW METHOD FOR EXPLORING THE UPPER IONOSPHERE,

Personal Author(s):

Bailey,Dana K

Report Date:

03 Oct 1947

Media Count:

18 Page(s)

Report Number(s):

-4

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The extensiveness and intensity of the ionization in the region above the height of maximum ionization of the F2 layer of the ionosphere is not known. It is shown that measurements of the refraction experienced by radio waves arriving at the earth after passage through the entire ionosphere can yield information about the uppermost regions of the ionosphere. An expression for the refraction of radio waves which pass through a parabolic layer model is derived. This permits a range of frequencies to be specified within which profitable refraction measurements can be made. Either the sun, which emits radio waves in the form of noise, or the moon, which can be used to return radio waves originating on the earth, is a suitable extraterrestrial source of radio waves. An experimental technique for measuring refraction is described and discussed. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604789

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMUM SHAPES FOR AXIALLY SYMMETRICAL SUPERSONIC THRUST NOZZLES,

Personal Author(s):

Guderley,G

Hantsch,E

Report Date:

04 Sep 1947

Media Count:

44 Page(s)

Report Number(s):

T-1

TT-64-71283

Monitor Series:

64-71283

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A determination was made of shapes of nozzles which, at a given mass rate of flow, given length, and given exit cross section, produce maximum thrust. The minimum sector is predetermined rather accurately by the mass rate of flow; thus, the most important geometrical features of the nozzle are contained in this formulation. For the solution two separate examinations were carried out. First, the shape of the nozzle near the minimum sector was determined. Second, the supersonic section of the nozzle was determined.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604788

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COLLECTION OF SOME GERMAN DATA ON SPECIAL TYPE LANDING GEARS: SEVEN PAPERS,

Personal Author(s):

Feldinger,Woyczehowski,

Report Date:

01 Aug 1947

Media Count:

32 Page(s)

Report Number(s):

T-2

TT-64 71282

Monitor Series:

64 71282

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) Discussion is presented of the means with the aid of which overloaded airplanes may take off.

Consideration is given to the problems of auxiliary rolling and jettisonable gears, as well as a brief

analysis of the problems in launching large size, overloaded airplanes with the aid of a catapult or other means, such as an electrically driven take-off cart. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0607190

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMBAT BETWEEN HETEROGENEOUS FORCES,

Personal Author(s):

Helmer,O

Report Date:

05 May 1947

Media Count:

12 Page(s)

Report Number(s):

RM-6

Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:
AD0435004
Full Text (pdf) Availability:
View Full Text (pdf)
File: /U2/435004.pdf
Size: 1 MB
Handle / proxy Url: <http://handle.dtic.mil/100.2/AD435004>
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) THE MYTH OF OVERKILL. A CRITIQUE OF A STRATEGY FOR AMERICAN SECURITY
Personal Author(s):
Katz, Amrom H
Report Date:
Jan 1944
Media Count:
13 Page(s)
Report Number(s):
P
2846
XC-USAF
Monitor Series:
USAF
Report Classification:
Unclassified
Distribution Limitation(s):
01 - APPROVED FOR PUBLIC RELEASE
Distribution Statement:
Approved for public release; distribution is unlimited.

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0423985

Full Text (pdf) Availability:

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File: /U2/423985.pdf

Size: 5 MB

Handle / proxy Url: <http://handle.dtic.mil/100.2/AD423985>

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE EFFECTS OF WORD FAMILIARITY AND LETTER STRUCTURE FAMILIARITY ON THE PERCEPTION OF WORDS

Personal Author(s):

Owsowitz, Sidney E

Report Date:

Jan 1943

Media Count:

77 Page(s)

Report Number(s):

P-2820

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Distribution Statement:

Approved for public release; distribution is unlimited.

Abstract:

(U) An experiment was conducted to test the hypothesis that familiarity of letter structure (as opposed to familiarity of the word) would facilitate the perception of the word. The results showed an interaction between letter structure familiarity and word familiarity such that while letter structure familiarity facilitated correct identification of the letters of the word, letter structure familiarity resulted in inhibiting the perception of unfamiliar words. When the letter structure was less familiar, familiar and unfamiliar words did not differ in threshold.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604756

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON THE PROBLEMS OF UTILIZING ATOMIC ENERGY. PT. VIII. THE USE OF RADIOACTIVE SUBSTANCES IN TECCCHNOLOGY,

Personal Author(s):

Nesmeyanov,A

Report Date:

Jan 1935

Media Count:

10 Page(s)

Report Number(s):

T-42 PT. 8

TT-64 71250

Monitor Series:

64 71250

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The article considers briefly the use of radioactive substances in such diversified problems as the following: the radiosopic examination of metallic articles of defects by means of the gamma-radiation from cobalt-60; the preparation of autoluminescent compounds; the automatic control of industrial processes such as regulating the flow of liquids and the thickness of metal sheets and foils; the preservation of foodstuffs by sterilization through irradiation; the manufacture of supersensitive measuring devices; the reduction in ignition delay time in radar gas-discharge tubes and the manufacture of high-value resistors; the use of the method of tagged atoms for determining wear in moving parts of mechanical devices such as piston rings in internal combustion engines and for studying the diffusion of various metallic components in alloys. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604761

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON THE PROBLEMS OF UTILIZING ATOMIC ENERGY. PT. V. THE NUCLEAR FUEL ENGINE,

Personal Author(s):

Pokrovskii,G

Report Date:

Jan 1935

Media Count:

10 Page(s)

Report Number(s):

T-42 PT. 5

TT-64 71255

Monitor Series:

64 71255

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The article is concerned with the application of atomic engines to submarines, aircraft, guided missiles and automobiles. It is suggested that atomic submarines could provide an excellent means of communication in the Arctic since they could travel unhindered under the ice where there is always a layer of unfrozen water. Although not yet used in aircraft, atomic engines have great significance for pilotless aviation, e. g., guided missiles, long-range rockets, and cargo- and passenger-towing aircraft, since there is no need for extremely heavy shielding around the nuclear power plant. With regard to automobile transport, the existence of a project is indicated which makes use of gaseous fissionable materials in an internal combustion type of engine. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604760

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON THE PROBLEMS OF UTILIZING ATOMIC ENERGY. PT. VII. THE ATOMIC INDUSTRY,
2,

Personal Author(s):

Astashenkov,P

Report Date:

Jan 1935

Media Count:

10 Page(s)

Report Number(s):

T-42 PT. 7

TT-64 71254

Monitor Series:

64 71254

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604759

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON THE PROBLEMS OF UTILIZING ATOMIC ENERGY. PT. VI. THE ATOMIC INDUSTRY,
1,

Personal Author(s):

Komanov,A

Report Date:

Jan 1935

Media Count:

10 Page(s)

Report Number(s):

T-42 PT. 6

TT-64 71253

Monitor Series:

64 71253

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The article lists the geographical location of uranium ore processing plants in Belgium, Canada, England and the USA. Two photographs, which accompanied the original article, one of the Clinton Engineer Works at Oak Ridge, Tenn., and the other of the Hanford Engineer Works near Pasco, Wash., serve as the basis for a discussion of plants for the production of uranium 235 and of plutonium 239, respectively. The last quarter of the article is devoted to decrying the 'one-sided, exclusively military character' of the atomic industry in the USA.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604624

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COSTS OF ALTERNATIVE AIR BASE STOCKING AND REQUISITIONING POLICIES,

Personal Author(s):

Petersen,J W

Geisler,M A

Report Date:

Jan 1935

Media Count:

28 Page(s)

Report Number(s):

P-611

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) A mathematical and statistical study of the supply operations at a typical Air Force base is made. The objective of the study is to determine the effect upon support cost of different logistics policies, involving changes in safety level and requisitioning frequency. This effect is found to vary according to the price and demand rate of the item being considered, and the study indicates that large monetary savings can be realized by adopting different stocking and requisitioning policies dependent upon item demand and price. Thus, the study indicates that it is more economical to have items costing under \$10 requisitioned from the depot every three or six months, rather than every month, even if obsolescence charges on base stocks are as high as 50 per cent per year. The study has also indicated that standby stockage of cheap (under \$10), low demand items is desirable because the cost of such stockage tends to be less than the costs incurred by premium supply action when a demand for such an item arises.

(Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604763

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON THE PROBLEMS OF UTILIZING ATOMIC ENERGY. PART III. NUCLEAR REACTORS,

Personal Author(s):

Arkhipov,M

Report Date:

Jan 1935

Media Count:

10 Page(s)

Report Number(s):

T-42 pt. 3

TT-64 71257

Monitor Series:

64 71257

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The present paper is the third in this series. It discusses briefly the problems connected with the construction, operation and application of heterogeneous and homogeneous nuclear reactors.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604764

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC WEAPONS AND ANTIATOMIC DEFENSE. PART I. ATOMIC WEAPONS AND ANTIATOMIC DEFENSE,

Personal Author(s):

OLISOV,B

Report Date:

Jan 1935

Media Count:

10 Page(s)

Report Number(s):

T-41 PT. 1

TT-64 71258

Monitor Series:

64 71258

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604766

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON GUIDED MISSILES. PT. I. CONSTRUCTION AND METHODS OF APPLICATION,

Personal Author(s):

Pugachev,V

Marisov,B

Report Date:

Jan 1935

Media Count:

10 Page(s)

Report Number(s):

T-44 PT. 1

TT-64 71260

Monitor Series:

64 71260

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The article is an elementary exposition on the subject of guided missiles, their methods of guidance and methods of application. The article is illustrated by sketches of four missiles which superficially resemble three well-known USA guided missiles (the Matador, the Nike, and the Corporal) and one less well-known German missile (the X-4 air-to-air rocket). No mention is made of specific Soviet guided missile development.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604762

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON THE PROBLEMS OF UTILIZING ATOMIC ENERGY. PART IV. THE NUCLEAR POWER STATION,

Personal Author(s):

Naumenko,I

Report Date:

Jan 1935

Media Count:

10 Page(s)

Report Number(s):

T-42 pt. 4

TT-64 71256

Monitor Series:

64 71256

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) In the first half of the paper the organization of a nuclear power station are examined, the difficulties associated therewith are discussed, and the advantages and disadvantages thereof by comparison with conventional thermal power stations are listed. In the second half of the paper, three methods for transforming atomic energy directly into electrical energy are briefly discussed: (a) by using thermocouples to generate a thermoelectric E. M. F.; (b) by using the positive charge on nuclear fission fragments to develop a potential difference between two concentric spherical shells and thus generate an E. M. F.; and (c) by using the electron voltaic effect induced in transistors by beta-particle bombardment. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604785

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE NEW AMERICAN SUBMARINE 'NAUTILUS' (WITH COMMENTARY AND APPENDICES A-C)

Personal Author(s):

Belashchenko,T

Report Date:

Jan 1934

Media Count:

14 Page(s)

Report Number(s):

TT-64 71279

Monitor Series:

64 71279

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The Russian evaluation of the world's first atomic submarine, nautilus, is presented. Comments by the American press on the vessel are also included.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604784

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CHATS ON THE ATOMIC WEAPON,

Report Date:

Jan 1934

Media Count:

4 Page(s)

Report Number(s):

T-36

TT-64 71278

Monitor Series:

64 71278

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper is a translation of an article which appeared in a recent issue of Red Star, the central organ of the Ministry of Defense of the USSR. It deals with the conduct of troops under atomic warfare conditions.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604780

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC ENERGY. PT. VI. ATOMIC ENERGY IN THE SERVICE OF THE NATIONAL ECONOMY,

Personal Author(s):

Mikhailov,V

Mkrtychev,M

Report Date:

Jan 1934

Media Count:

10 Page(s)

Report Number(s):

TT-64 71274

Monitor Series:

64 71274

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The utilization of atomic energy for industrial purposes in the USSR is discussed. The prospects for using atomic energy and radioactive substances for peaceful purposes are viewed as being beneficial to the Soviet economy.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604779

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC ENERGY. PT. VII. THE PHYSICS OF THE BEHAVIOR OF NUCLEAR FORCES (THE SHOCK WAVE),

Personal Author(s):

Pokrovskii,G

Report Date:

Jan 1934

Media Count:

11 Page(s)

Report Number(s):

TT-64 71273

Monitor Series:

64 71273

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604778

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON ATOMIC ENERGY. PT. XI. THE PHYSICS OF THE BEHAVIOR OF NUCLEAR FORCES
IN THE ATMOSPHERE AND AT SEA,

Personal Author(s):

Pokrovskii,G

arkhipov,M

Report Date:

Jan 1934

Media Count:

10 Page(s)

Report Number(s):

T-35 PT. 11

TT-64 71272

Monitor Series:

64 71272

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0604776

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHEN CAN THE SOVIET UNION RISK ATOMIC WAR,

Report Date:

Jan 1934

Media Count:

8 Page(s)

Report Number(s):

T-29

TT-64 71270

Monitor Series:

64 71270

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The paper discussed the possibility that the Soviet Union might start an atomic war against the West in 1956.

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0270127

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE EFFECTIVENESS OF SEARCH ALGORITHMS BASED ON SAMPLES OF CONTROLLED DURATION (SEQUENTIAL DETECTION)

Personal Author(s):

KOBZAREV,U B

BASHARINOV,A E

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The investigation showed that controlled search techniques can improve the efficiency of signal detection. In particular, for a given frame time, controlling the direction of search allows one to reduce the average radiated power. Allowing a variety of possible signal forms (the capacity permitted in delay time and doppler spread, fluctuations in signal intensity) reduces the gain achieved by using controlled search procedures. (Author)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

Accession Number:

AD0259327

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STRUCTURES UNDER REPEATED BLAST LOADINGS

Personal Author(s):

WEIDLINGER,PAUL

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

Abstract:

(U) The vulnerability of a target subjected to a series of repeated shots is examined. It is shown that properly designed elasto-plastic structures are capable of surviving the cumulative effects of repeated blasts if each blast is less intense than a destructive single blast. The blast intensity of a small number of repeated shots need not be significantly smaller than the intensity of a single destructive blast to permit the survival of most structures. The probability of kill, taking into account the cumulative effects of a series of blasts, is determined and it is shown that it is not significantly higher than the probability of kill obtained by neglecting cumulative damage. (AUTHOR)

Abstract Classification:

Unclassified

Technical Reports Collection

Citation Format: FOIA(U2)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

ADD100436

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPOSITE MATERIALS IN HIGH PERFORMANCE DRONE AIRFRAMES,

Personal Author(s):

ADAMS,D F

Media Count:

14 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

01 - APPROVED FOR PUBLIC RELEASE

24 - MICROFICHE ONLY

Distribution Statement:

Proceedings of the Sixth St. Louis Symposium on Composite Materials in Engineering Design, Held 11-12 May 72, Sponsored by Monsanto Co. and Washington University Association, pp 283-296. Published by American Society for Metals, Metals Park, OH. (No copies furnished by MCIC/DTIC/NTIS).

DTIC DOES NOT HAVE THIS ITEM

Highest Classification: UNCLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0345973

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/345973.pdf

Size: 680 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RUNWAY AND UNDERCARRIAGE DESIGN CONSIDERATIONS FOR VERY LARGE AIRCRAFT

Descriptive Note:

Memorandum

Personal Author(s):

Kirkwood, T F

Report Date:

Dec 1963

Media Count:

36 Page(s)

Report Number(s):

RAND-RM-3577-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; DEC 1963. Other requests shall be referred to Air Force Research and Development Command, Attn: Project RAND, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0346356

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME FACTORS FOR SELECTION OF A FUTURE AIR DEFENSE SYSTEM FOR NATO EUROPE

Personal Author(s):

Dadant,P M

Report Date:

Dec 1963

Media Count:

110 Page(s)

Report Number(s):

RM3659ISA

Contract Number:

SD79

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0346309

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE INTERDICTION OF RAIL AND BRIDGE TARGETS FROM LOW ALTITUDE USING CONVENTIONAL BOMBS

Personal Author(s):

Green,J R
Report Date:
Dec 1963
Media Count:
49 Page(s)
Report Number(s):
3512 PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0346182
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOME OFFENSE ACTIONS AGAINST HARDENED AND DEFENDED POINT TARGETS
Personal Author(s):
Kephart,D C
Report Date:
Dec 1963
Media Count:
44 Page(s)
Report Number(s):
RM3749 ARPA
Contract Number:
SD79
Report Classification:
SECRET
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
51 - RESTRICTED DATA
Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0346352

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUPPORT CAPABILITIES FOR LIMITED WAR IN IRAN

Personal Author(s):

Jones, Norman H , Jr

Report Date:

Dec 1963

Media Count:

69 Page(s)

Report Number(s):

3852ISA

Contract Number:

SD79

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0346425

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN INVESTIGATION OF A GUIDANCE SCHEME FOR ICBM INTERCEPTION AT LOW ALTITUDES

Personal Author(s):

Hutcheson,J H
Jolissaint,J A
Report Date:
Dec 1963
Media Count:
66 Page(s)
Report Number(s):
RM3906ARPA
Contract Number:
SD79
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0429979
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) EFFICIENCY IN SPACE-ROCKET LAUNCHING OPERATIONS: RECENT ADVANCES AND FUTURE OPPORTUNITIES,
Personal Author(s):
Lewis,D E
Shubert,G H
Report Date:
Dec 1963
Media Count:
43 Page(s)
Report Number(s):
RM3913PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0345215

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MODIFICATION AND OPERATION OF SHIPS AS MOBILE PLATTFORMS FOR LARGE RADARS,

Personal Author(s):

Selin,Ivan

Report Date:

Nov 1963

Media Count:

94 Page(s)

Report Number(s):

RM3907PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0345429

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESTIMATED COSTS FOR HARD POINT DEFENSE SYSTEMS,

Personal Author(s):

Early,L B
Harris,H F
Large,J P
Report Date:
Nov 1963
Media Count:
57 Page(s)
Report Number(s):
RM3754ARPA
Contract Number:
SD79
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0345339
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) LONG-ENDURANCE-AIRCRAFT STUDY
Personal Author(s):
Fisher, G H
Krase, W H
Large, J P
Rosenzweig, H
Report Date:
Nov 1963
Media Count:
139 Page(s)
Report Number(s):
RAND-RM-3678-1-PR
XC-USAF
Contract Number:
AF 49 (638)-700

Monitor Series:

USAF

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; NOV 1963. Other requests shall be referred to HQ USAF, Deputy Chief of Staff, Research and Development, Attn: Dir. of Development Planning, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0426330

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GUESSES ABOUT DE GAULLE,

Personal Author(s):

Leites,Nathan

Report Date:

Nov 1963

Media Count:

91 Page(s)

Report Number(s):

RM3667ISA

Contract Number:

SD79

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Notice: Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0346794

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METHOD FOR ESTIMATING ROAD CAPACITY AND TRUCK REQUIREMENTS

Personal Author(s):

Holiday, Leo P

Report Date:

Nov 1963

Media Count:

171 Page(s)

Report Number(s):

3331ARPA

Contract Number:

SD79

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0345147

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE INDONESIAN DOCTRINE OF TERRITORIAL WARFARE AND TERRITORIAL MANAGEMENT,

Personal Author(s):

Pauker, Guy J

Report Date:

Nov 1963

Media Count:

322 Page(s)
Report Number(s):
RM3312PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
Distribution Statement:
No Foreign.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0345057
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ROTATIONAL DISSOCIATION OF MOLECULES IN HIGH ALTITUDE MISSILE PLUMES,
Personal Author(s):
Cunningham,S P
Report Date:
Nov 1963
Media Count:
32 Page(s)
Report Number(s):
RM3846ARPA
Contract Number:
SD79
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0345061

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EMPTY HOLE PROBLEM FOR STRATEGIC MISSILES: ITS NATURE AND SIGNIFICANCE,

Personal Author(s):

Speier, Richard H

Report Date:

Nov 1963

Media Count:

33 Page(s)

Report Number(s):

RM3911PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224254

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Optimal Two-and Three-Stage. Production Schedules with Setup Times Included,

Report Date:

20 Oct 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0421703
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) REAL WAGES IN SOVIET RUSSIA SINCE 1928,
Personal Author(s):
Chapman,Janet G
Report Date:
Oct 1963
Media Count:
395 Page(s)
Report Number(s):
R371PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0421140
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) COMPUTERS AND INFORMATION FLOW,

Personal Author(s):

Patrick,R L

Report Date:

Oct 1963

Media Count:

20 Page(s)

Report Number(s):

P2791

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0380558

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET AIR MISSION EXPENDITURES AND RUBLE-DOLLAR RATIOS.

Personal Author(s):

Summers,Robert

Report Date:

Oct 1963

Media Count:

26 Page(s)

Report Number(s):

RM-3723-PR

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: USGO: others to Headquarters, USAF, Deputy Chief of Staff, Research and Development, Directorate of Operational Requirements and Development Plans, Washington, D. C. 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0421995

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FISSION-ELECTRIC CELL PROJECT,

Personal Author(s):

Safonov,George

Report Date:

Oct 1963

Media Count:

164 Page(s)

Report Number(s):

RM3908PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0420211

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELIABILITY SCIENCE AND TECHNOLOGY IN MILITARY AND INDUSTRIAL CONTEXTS,

Personal Author(s):

Stoller,David S

Report Date:
Oct 1963
Media Count:
9 Page(s)
Report Number(s):
P2802
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0421185
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SPARE ENGINE REQUIREMENTS FOR THE F-5A B MILITARY ASSISTANCE PROGRAM,
Personal Author(s):
Fishman,George S
Report Date:
Oct 1963
Media Count:
24 Page(s)
Report Number(s):
RM3790PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0344825

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNIST CHINA'S MILITARY DOCTRINE AND STRATEGY,

Personal Author(s):

Hsieh,Alice Langley

Report Date:

Oct 1963

Media Count:

48 Page(s)

Report Number(s):

MRM3833PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0343646

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BOOST INTERCEPTION OF ICBM'S

Descriptive Note:

Memorandum rept.

Personal Author(s):

Morris, Deane

Report Date:

Oct 1963

Media Count:

61 Page(s)

Report Number(s):

RAND/RM-3897-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff, Research and Development (Air Force), Directorate of Development Planning, Attn: Project RAND Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0344397

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/344397.pdf

Size: 820 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME THOUGHTS ON R AND D FOR TAC

Descriptive Note:

Memorandum

Personal Author(s):

Bailey, H H

Report Date:

Oct 1963

Media Count:

32 Page(s)

Report Number(s):

RM-3896-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; Oct 1963. Other requests shall be referred to the Deputy Chief of Staff, Research and Development , Attn: Dir. of Development Planning, (Air Force), Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0344589

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF MILITARY AIR TRANSPORTATION, 1963-1967,

Personal Author(s):

Fort,D M

Niskanen,W A

Report Date:

Oct 1963

Media Count:

115 Page(s)

Report Number(s):

R405PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0344747

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COLLATERAL CIVIL DAMAGE FROM MILITARY ATTACKS IN GENERAL WAR,

Personal Author(s):

McGarvey,D C

Report Date:

Oct 1963

Media Count:

1 Page(s)

Report Number(s):

RM3685PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Notice: Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0343767

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A DISCUSSION OF SOME PROSPECTS AND PROBLEMS OF ACHIEVING ANTI-SATELLITE CAPABILITIES

Descriptive Note:

Memorandum rept.

Personal Author(s):

Rosen, J H

Report Date:

Oct 1963

Media Count:

59 Page(s)

Report Number(s):

RAND/RM-3810-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff, Research and Development (Air Force), Directorate of Development Planning, Attn: Project RAND Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0344597

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LONG-RANGE ATTACK AIRCRAFT WITH V/STOL CAPABILITY,

Personal Author(s):

Schamberg,R

Weber,C M ,Jr

Report Date:

Oct 1963

Media Count:

43 Page(s)

Report Number(s):

RM3725PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0344429

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DESIGN LAYOUT FOR THE COMMAND CONTROL SECTION OF A LONG ENDURANCE AIRCRAFT,

Personal Author(s):

Northrop,G M

Report Date:

Oct 1963

Media Count:

37 Page(s)

Report Number(s):

RM3865PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0343869

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A DISCUSSION OF THE AIREW OBSERVATION

Descriptive Note:

Memorandum rept.

Personal Author(s):

Gelinas, R W

Report Date:

Oct 1963

Media Count:

33 Page(s)

Report Number(s):

RAND/RM-3641-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

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AFRDC

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Distribution Statement:

Controlling DoD Organization: Directorate of Development Planning, Deputy Chief of Staff, Research and Development (Air Force), Washington, DC 20330.

Technical Reports Collection

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File: /UL/343881.pdf

Size: 696 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A VIEW OF OPERATIONS RESEARCH IN NATIONAL DEFENSE: A SPEECH TO THE 21ST OPERATIONS ANALYSIS TECHNICAL CONFERENCE

Descriptive Note:

Memorandum

Personal Author(s):

Oyster, D E

Report Date:

Oct 1963

Media Count:

24 Page(s)

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XC-AFRDC

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AF 49(638)-700

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Report Classification:

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Technical Reports Collection

Citation Format: FOIA(UL)

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ADB212090

Full Text (pdf) Availability:

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File: /UL/b212090.pdf

Size: 23 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A Study of the Research Potentials of the Academic Community Applicable to Project

Personal Author(s):

Crawford, Robert

Report Date:

Oct 1963

Media Count:

660 Page(s)

Report Number(s):

XT-ARPA

Contract Number:

ARPA ORDER-189-61

Monitor Series:

ARPA

Report Classification:

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12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0344767

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CERTAIN EFFECTS OF CULTURE AND SOCIAL ORGANIZATION OF INTERNAL SECURITY IN THAILAND,

Personal Author(s):

Phillips,H P

Wilson,D A

Report Date:

Sep 1963

Media Count:

43 Page(s)

Report Number(s):

RM3786ARPA

Contract Number:

SD79

ARPA-ORDER-189-61

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0417289

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) QUICK COUNT: A GENERAL WAR CASUALTY ESTIMATION MODEL,

Personal Author(s):

Wegner,L H

Report Date:

Sep 1963

Media Count:

70 Page(s)

Report Number(s):

Memo. RM 3811 PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0420565
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) EXACT METHODS IN LINGUISTIC RESEARCH,
Personal Author(s):
Akhmanova,O S
Mel'chuk,I A
Paducheva,E V
Hays,David G
Report Date:
Sep 1963
Media Count:
184 Page(s)
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AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0341876
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) USAF LOGISTICS CONCEPT, 1965-1975,
Personal Author(s):
Zwick, C J
Tokarz, C P
Report Date:
Sep 1963
Media Count:
25 Page(s)
Report Number(s):

RM-3843-PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0345736
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) AREA DEFENSE AGAINST SUBMARINE-LAUNCHED BALLISTIC MISSILES,
Personal Author(s):
Blumenthal, I S
Report Date:
Sep 1963
Media Count:
140 Page(s)
Report Number(s):
RM3837ARPA
Contract Number:
SD79
Report Classification:
SECRET
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
51 - RESTRICTED DATA
Distribution Statement:
Notice: Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0342294

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Some Political and Technical Considerations of First-Pass Satellite Interception.

Personal Author(s):

Frye,Alton

Nyland,Fred S

Rosen,James

Report Date:

Sep 1963

Media Count:

30 Page(s)

Report Number(s):

Memo RM3841PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

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09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0343340

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/343340.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) FALLOUT PREDICTION FOR NORAD. ANALYSIS AND SUGGESTIONS

Personal Author(s):

Huschke, R E

Rapp, R R

Report Date:

Sep 1963

Media Count:

51 Page(s)

Report Number(s):

RAND-RM-3876-PR

XC-USAF

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AF 49(638)-700

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0419551

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME RECENT FOREIGN DEVELOPMENTS APPLICABLE TO RECONNAISSANCE,

Personal Author(s):

Katz, Amrom H

Report Date:

Sep 1963

Media Count:

41 Page(s)

Report Number(s):

RM-3801-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0342079

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE THE MANNED BOMBERS PLAYED IN STRATEGY AND FORCE EVALUATION GAMES

Personal Author(s):

Brown,T A

Report Date:

Sep 1963

Media Count:

22 Page(s)

Report Number(s):

RM-3751-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0421141
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) FORTRESS AMERICA: A REPLY,
Personal Author(s):
Hoag,Malcolm W
Report Date:
Sep 1963
Media Count:
9 Page(s)
Report Number(s):
P2797
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0342331
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) FURTHER PROGRESS TOWARD A PRACTICAL THEORY OF NUCLEAR-CLOUD BEHAVIOR
Personal Author(s):
Rapp,R R
Huschke,R E
Report Date:
Sep 1963
Media Count:
34 Page(s)
Report Number(s):
RM-3788-DASA
Contract Number:
DA49 146XZ157

Report Classification:

SECRET

Distribution Limitation(s):

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52 - FORMERLY RESTRICTED DATA

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Notice: Only military offices may request from DDC. Others request approval of Defense Atomic Support Agency, Wash. 25, D. C. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0343112

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DENUCLEARIZED ZONE IN ASIA: IMPLICATIONS FOR UNITED STATES POLICY

Personal Author(s):

Mozingo,D P

Report Date:

Sep 1963

Media Count:

83 Page(s)

Report Number(s):

RM3855PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0340528
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) POLITICAL-STRATEGIC IMPLICATIONS OF MILITARY SPACE ACTIVITIES
Personal Author(s):
Kecskemeti,Paul
Frye,Alton
Goldsen,Joseph
Report Date:
Sep 1963
Media Count:
98 Page(s)
Report Number(s):
RM-3662-PR
Contract Number:
AF49 638 700
Report Classification:
CONFIDENTIAL
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09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0421579
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE POLITICS OF SOCIAL CHANGE IN THE MIDDLE EAST AND NORTH AFRICA,
Personal Author(s):
Halpern,Manfred
Report Date:
Sep 1963
Media Count:
431 Page(s)
Report Number(s):

R417PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339349

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME GEOLOGICAL CONSIDERATIONS IN USING SEAMOUNT AND CORAL-REEF ENVIRONMENTS FOR UNDERWATER MISSILE-LAUNCH SYSTEMS

Personal Author(s):

ObersteLehn, Deane

Report Date:

31 Aug 1963

Media Count:

46 Page(s)

Report Number(s):

RM3154PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0342162

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EVOLUTION AND DEPLOYMENT OF SOVIET SURFACE TO-AIR MISSILES

Personal Author(s):

Zilbert, E R

Report Date:

Aug 1963

Media Count:

77 Page(s)

Report Number(s):

RM3768-1PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0343324

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ARRAY RADARS - PERFORMANCE AND COST TRADE-OFFS

Descriptive Note:

Memorandum

Personal Author(s):

Mallett, J D

Report Date:

Aug 1963

Media Count:

136 Page(s)

Report Number(s):

RM-3729-ARPA

XD-ARPA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

ARPA

Report Classification:

CONFIDENTIAL

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Distribution Statement:

Controlling DoD Organization. Defense Advanced Research Projects Agency, 1400 Wilson Blvd.,
Arlington, VA 22209-2308.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0415318

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE INSENSITIVITY OF HEAT TRANSFER TO THE INCLUSION OF FIRST ORDER SLIP BOUNDARY
CONDITIONS FOR SIMILAR LAMINAR HYPERSONIC BOUNDARY LAYERS,

Personal Author(s):

Aroesty,J

Report Date:

Aug 1963

Media Count:

10 Page(s)

Report Number(s):

P2780

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341354

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYSIS OF THE SANDIA 220 MC/SEC ATTENUATION DATA AT KAUAI DURING STARFISH

Personal Author(s):

LeLevier,R E

Report Date:

Aug 1963

Media Count:

13 Page(s)

Report Number(s):

RM-3784-PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

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51 - RESTRICTED DATA

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340799

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A RADIO INERTIAL MIDCOURSE GUIDANCE TECHNIQUE

Personal Author(s):

Garber, T B
Report Date:
Aug 1963
Media Count:
58 Page(s)
Report Number(s):
RM-3799-PR
Contract Number:
AF49 638 700
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0341327
Corporate Author:
RAND CORP SANTA MONICA CA
Personal Author(s):
Latter, Richard
Report Date:
Aug 1963
Media Count:
8 Page(s)
Report Number(s):
RM-3517-PR
Report Classification:
SECRET
Distribution Limitation(s):
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51 - RESTRICTED DATA
Distribution Statement:
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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340245

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SUBMERSIBLE AIRCRAFT-DESIGN FEASIBILITY AND PERFORMANCE CALCULATIONS

Personal Author(s):

Johnson, Roger P

Rumble, Henry P

Report Date:

Aug 1963

Media Count:

76 Page(s)

Report Number(s):

RM-3683-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

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Report Classification:

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Distribution Statement:

Controlling DoD Organization...Department of the Air Force, Attn: Public Affairs Office, Washington, DC, 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340547

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SHOOT-LOOK-SHOOT AT HARD TARGETS: AN EVALUATION OF THE USEFULNESS OF BOMB DAMAGE ASSESSMENT

Personal Author(s):

Arnsten,Michael E

Report Date:

Aug 1963

Media Count:

29 Page(s)

Report Number(s):

RM-3614-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0342017

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MINUTEMAN PAYLOADS AGAINST DEFENDED URBAN TARGETS

Personal Author(s):

Graham,W B

Report Date:

Aug 1963

Media Count:

63 Page(s)

Report Number(s):

RM-3800-PR

Contract Number:

AF49 638 700

Report Classification:

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Distribution Limitation(s):

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51 - RESTRICTED DATA

Distribution Statement:

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Citation Format: FOIA(UL)

Accession Number:

AD0341371

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A 1963 VIEW OF SAC HARDCORE

Personal Author(s):

Hammer,J G

Report Date:

Aug 1963

Media Count:

27 Page(s)

Report Number(s):

Memo. RM3706PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

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52 - FORMERLY RESTRICTED DATA

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AD0413981

Full Text (pdf) Availability:

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File: /UL/413981.pdf

Size: 534 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DETERMINATION OF THE D-LAYER DISSOCIATIVE RECOMBINATION COEFFICIENT FROM A HIGH ALTITUDE NUCLEAR EXPLOSION

Personal Author(s):

LeLevier, R E

Report Date:

Aug 1963

Media Count:

19 Page(s)

Report Number(s):

RAND-P-2756

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341990

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) B-52 PROTECTION IN A GENERAL WAR, 1965-1970

Personal Author(s):

Kao, Richard C
Report Date:
Aug 1963
Media Count:
181 Page(s)
Report Number(s):
Memo. RM3697PR
Contract Number:
AF49 638 700
Report Classification:
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Distribution Limitation(s):
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51 - RESTRICTED DATA
Distribution Statement:
Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0341904
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) NUCLEAR WEAPONS EFFECTS RESEARCH REQUIREMENTS
Personal Author(s):
McMillan, W G
Report Date:
Aug 1963
Media Count:
15 Page(s)
Report Number(s):
RM3783-ARPA
Contract Number:
SD79
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340549

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESTIMATING FUTURE ICBM REQUIREMENTS FOR COUNTER FORCE: THE RELATION OF WARHEAD SIZE AND NUMBER TO GUIDANCE ACCURACY AND FLEXIBILITY.

Personal Author(s):

Bower,J L

Report Date:

Aug 1963

Media Count:

67 Page(s)

Report Number(s):

RM-3782-PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0429981

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET SUCCESSION PROBLEM AND U. S. POLICY,

Personal Author(s):

Rush, Myron

Report Date:

Aug 1963

Media Count:

118 Page(s)

Report Number(s):

RM3818PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341344

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COUNTERFORCE AND DAMAGE-LIMITING CAPABILITY IN CENTRAL WAR, 1970

Personal Author(s):

Hoffman, Fred

Averch, Harvey

Lavin, Marvin

McGarvey, David

Wildhorn, Sorrel

Report Date:

Aug 1963

Media Count:

224 Page(s)

Report Number(s):

RAND-R-420-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

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51 - RESTRICTED DATA

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Technical Reports Collection

Citation Format: FOIA(UL)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

ADD512850

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PROSPECTS FOR SOME ULTRAVIOLET DETECTION SYSTEMS IN: IRIS PROC,VOL8, NO3, P297-311

Personal Author(s):

GELINAS,R W

Report Date:

Aug 1963

Media Count:

15 Page(s)

Report Number(s):

NAVEXOS-P-2315-3

Contract Number:

AF-49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0416476

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYMPOSIUM ON THE ROLE OF AIRPOWER IN COUNTERINSURGENCY AND UNCONVENTIONAL
WARFARE: ALLIED RESISTANCE TO THE JAPANESE ON LUZON, WORLD WAR II,

Personal Author(s):

Peterson ,A H

Reinhardt ,G C

Conger,E E

Report Date:

Jul 1963

Media Count:

52 Page(s)

Report Number(s):

RM-3655-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338490

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A BASIS FOR UNDERSTANDING THE SOVIET MILITARY PROBLEM IN THE SIXTIES

Personal Author(s):

Dinerstein, Herbert S

Wolfe, Thomas W

Report Date:

Jul 1963

Media Count:

130 Page(s)

Report Number(s):

RM-3631-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Not releasable to foreign nationals except Canadian and British.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338481

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCHEDULIN MAINTENANCE FOR THE MINUTEMAN MISSILE

Personal Author(s):

Jorgenson,D W

McCall,J J

Radner,R

Report Date:

Jul 1963

Media Count:

90 Page(s)

Report Number(s):

Memo. RM3035 1 PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338494

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RISK, AMBIGUITY AND FORCE STRUCTURE: AN ANALYSIS OF GENERAL-WAR FORCES AND STRATEGIC OBJECTIVES IN CASES C AND D (OF SIX CASE STUDIES)

Personal Author(s):

Averch,Harvey

Wildhorn,Sorrel

Report Date:

Jul 1963

Media Count:

91 Page(s)

Report Number(s):

RM-3511-PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0417481

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYMPOSIUM ON THE ROLE OF AIRPOWER IN COUNTER INSURGENCY AND UNCONVENTIONAL WARFARE: THE PHILIPPINE HUK CAMPAIGN,

Personal Author(s):

Peterson ,A H

Reinhardt ,G C

Conger,E F

Report Date:

Jul 1963

Media Count:

61 Page(s)

Report Number(s):

RM-3652-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339341

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ALTERNATIVE SOVIET STRATEGIC FORCE STRUCTURES, 1963-1975

Personal Author(s):

Brunner,E D

Report Date:

Jul 1963

Media Count:

28 Page(s)

Report Number(s):

Memo. RM3673ARPA

Contract Number:

SD79

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338497

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME PROBLEMS TO BE FACED IN DESIGNING THE NATIONAL MILITARY COMMAND SYSTEM

Personal Author(s):

Jones, William M

Report Date:

Jul 1963

Media Count:

20 Page(s)

Report Number(s):

RM3695PR

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339361

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REVIEW OF THE SOLID-PROPULSION REQUIREMENTS FOR LOW-ALTITUDE DEFENSE INTERCEPTORS

Personal Author(s):

Harris,E D

Report Date:

Jul 1963

Media Count:

29 Page(s)

Report Number(s):

RM3580ARPA

Contract Number:

SD79

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0416231

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYMPOSIUM ON THE ROLE OF AIRPOWER IN COUNTER INSURGENCY AND UNCONVENTIONAL
WARFARE: UNCON- VENTIONAL WARFARE IN THE MEDITERRANEAN THEATER,

Personal Author(s):

Peterson,ED BY A H
Reinhardt,G C
Conger,E E
Report Date:
Jul 1963
Media Count:
45 Page(s)
Report Number(s):
Memoorandum RM3656PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0338242
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE MINUTEMAN INERTIAL GUIDANCE SYSTEM REPAIR SIMULATION
Personal Author(s):
Steorts,R C
Voosen,B J
Report Date:
Jul 1963
Media Count:
47 Page(s)
Report Number(s):
RM-3565-PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0412652

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NUCLEAR STRATEGIC OPTIONS AND EUROPEAN FORCE PARTICIPATION,

Personal Author(s):

Hoag,Malcolm W

Report Date:

Jul 1963

Media Count:

52 Page(s)

Report Number(s):

P2594 2

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337953

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FORECASTING SOVIET FORCE STRUCTURE: THE IMPORTANCE OF BUREAUCRATIC AND BUDGETARY CONSTRAINTS

Personal Author(s):

Loftus,J E

Marshall,A W

Report Date:

Jul 1963

Media Count:

75 Page(s)

Report Number(s):

RM3612PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337840

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE POLITICAL ASPECTS OF ARTIFICIAL RADIATION BELTS

Personal Author(s):

Welch,J A

Report Date:

Jul 1963

Media Count:

7 Page(s)

Report Number(s):

RM3743PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338461

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON MISSILE WARHEAD VULNERABILITY

Personal Author(s):

Karzas,W J

Latter,Richard

Report Date:

Jul 1963

Media Count:

5 Page(s)

Report Number(s):

RM-3736-PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Nt releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0411340

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ROCKET: RAND'S OMNIBUS CALCULATOR OF THE KINEMATICS OF EARTH TRAJECTORIES,

Personal Author(s):

Boehm,Barry

Report Date:

Jul 1963

Media Count:

251 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339517

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POSSIBLE COLD-WAR USES OF AN ANTI-SATELLITE SYSTEM

Personal Author(s):

Parker,T M

Report Date:

Jul 1963

Media Count:

64 Page(s)

Report Number(s):

RM-3775-PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339404

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRECISION DECOYS USED WITH A LARGE-YIELD WARHEAD BURST AT HIGH ALTITUDES.

Personal Author(s):

Whitener,J E

Latter,A L

Report Date:

Jul 1963

Media Count:

31 Page(s)

Report Number(s):

RM3740PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339390

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Geomagnetic Disturbances Produced by High-Altitude Nuclear Bursts

Descriptive Note:

Memorandum rept.

Personal Author(s):

Field, E C

Report Date:

Jul 1963

Media Count:

25 Page(s)

Report Number(s):

RAND/RM-3750-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUL 1963. Other requests shall be referred to Deputy Chief of Staff Research and Technology (Air Force), Directorate of Development Planning, Attn: Project RAND Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338459

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SUGGESTED MEANS FOR HARD-POINT DEFENSE

Personal Author(s):

Latter, Richard

Report Date:

Jul 1963

Media Count:

4 Page(s)

Report Number(s):

RM-3737-PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB212139

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/b212139.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Symposium on the Role of Airpower in Counterinsurgency and Unconventional Warfare: Chindit Operations in Burma.

Descriptive Note:

Memorandum rept.,

Personal Author(s):

Peterson, A H

Reinhardt, G C

Conger, E E

Report Date:

Jul 1963

Media Count:

55 Page(s)

Report Number(s):

RAND/RM-3654-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337774

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME FUTURE COMBAT AIRCRAFT OPTIONS

Descriptive Note:

Research memo.,

Personal Author(s):

Rumph,L B

Report Date:

Jun 1963

Media Count:

25 Page(s)

Report Number(s):

RM-3733-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340003

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/340003.pdf

Size: 764 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN ASSESSMENT OF FIXED-SURFACE REGENERATIVE TURBOPROPS FOR LONG- ENDURANCE
AIRCRAFT

Personal Author(s):

Krase, W H

Report Date:

Jun 1963

Media Count:

31 Page(s)

Report Number(s):

RM-3630-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; JUN 1963. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339544

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE PERFORMANCE OF GROUND-LAUNCHED TERMINAL ICBM INTERCEPTORS

Personal Author(s):

Oelschlager, R T

Report Date:

Jun 1963

Media Count:

106 Page(s)

Report Number(s):

RAND/RM-3510-ARPA

XD-ARPA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

ARPA

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Defense Advanced Research Projects Agency, 3701 N. Fairfax Dr.,
Arlington, VA 22203-1714.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337842

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DEPOT MAINTENANCE: A TEN-YEAR WORKLOAD FORECAST

Personal Author(s):

Johnson,R E

Report Date:

Jun 1963

Media Count:

52 Page(s)

Report Number(s):
Memo. RM3509PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0412289
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ARMY COST MODEL DATA,
Personal Author(s):
Meltsner,A J
Martyn,R A
Pringle,J J
Report Date:
Jun 1963
Media Count:
1 Page(s)
Report Number(s):
Memo. RM3639ASDC
Contract Number:
SD83
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0343625

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE BEHAVIOR OF LARGE, HOT BUBBLES IN THE ATMOSPHERE

Descriptive Note:

Memorandum rept.

Personal Author(s):

Rapp, R R

Huschke, R E

Report Date:

Jun 1963

Media Count:

55 Page(s)

Report Number(s):

RAND/RM-3605-DASA

DASA-1381

XD-1381

Contract Number:

DA-49-146-XZ-157

Monitor Series:

1381

DASA

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUN 1963. Other requests shall be referred to Defense Threat Reduction Agency, 8725 John J. Kingman Rd., MS 6201, Fort Belvoir, VA 22060-6201. Formerly Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0412418
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) CHINA AND JAPAN,
Personal Author(s):
Langer,Paul F
Report Date:
Jun 1963
Media Count:
18 Page(s)
Report Number(s):
P2760
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0337162
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) A NOTE ON COUNTERFORCE
Descriptive Note:
Memorandum rept.
Personal Author(s):
Latter, A L
Report Date:
Jun 1963
Media Count:
10 Page(s)
Report Number(s):
RAND/RM-3718-PR
XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

51 - RESTRICTED DATA

Distribution Statement:

Controlling DoD Organization: HQ USAF, Deputy Chief of Staff Research and Development, Directorate of Development Planning, Attn: RAND Project Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337068

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/337068.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE DYNAMIC STABILITY OF SUBMERSIBLE PLATFORMS IN OCEAN WAVES

Descriptive Note:

Research memo.

Personal Author(s):

Leendertse, J J

Report Date:

Jun 1963

Media Count:

83 Page(s)

Report Number(s):

RAND-RM-3488-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUN 1963. Other requests shall be referred to Air Force Research and Development Command, Directorate of Development Planning, Attn: Project RAND, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337164

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BOMB DAMAGE ASSESSMENT

Descriptive Note:

Memorandum rept.

Personal Author(s):

Latter, Richard

Report Date:

Jun 1963

Media Count:

10 Page(s)

Report Number(s):

RAND/RM-3713-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

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CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: HQ USAF, Deputy Chief of Staff Research and Development, Directorate of Development Planning, Attn: RAND Project Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338114

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ARTIFICIAL RADIATION BELTS AND MANNED MILITARY SATELLITES

Personal Author(s):

Dole, S H

Dugas, Doris J

Report Date:

Jun 1963

Media Count:

17 Page(s)

Report Number(s):

RM-3427-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337163

Corporate Author:

RAND CORP SANTA MONICA CA

Descriptive Note:

Memorandum rept.

Personal Author(s):

Dalkey, N C

Latter, A L

Report Date:

Jun 1963

Media Count:

14 Page(s)

Report Number(s):

RAND/RM-3711-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

51 - RESTRICTED DATA

Distribution Statement:

Controlling DoD Organization: HQ USAF, Deputy Chief of Staff Research and Development, Directorate of Development Planning, Attn: RAND Project Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0407493

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/407493.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RADIATIVE TRANSFER IN A PLANETARY ATMOSPHERE WITH IMPERFECT SCATTERING

Personal Author(s):

Sekera, Zdenek

Report Date:

Jun 1963

Media Count:

77 Page(s)

Report Number(s):

RAND-413-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0411554

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/411554.pdf

Size: 13 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CONCEPTS AND PROCEDURES OF COST ANALYSIS

Descriptive Note:

Memorandum

Personal Author(s):

Large, J P

Report Date:

Jun 1963

Media Count:

404 Page(s)

Report Number(s):

RAND-RM-3589-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0407909

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/407909.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE ROLE OF CIVIL DEFENSE IN SOVIET STRATEGY

Descriptive Note:

Research memo.

Personal Author(s):

Goure, Leon

Report Date:

Jun 1963

Media Count:

33 Page(s)

Report Number(s):

RAND-RM-3703-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUN 1963. Other requests shall be referred to Air Force Research Development Command, Deputy Chief of Staff of Development Planning, Attn: RAND Project, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340170

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET AIR ARMAMENTS AND THEIR COSTS, 1946 1961

Personal Author(s):

Brunner, E D

Report Date:

May 1963

Media Count:

76 Page(s)

Report Number(s):

RM3508PR

XC-AFRDC

Contract Number:

AF49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

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02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 1963. Other requests shall be referred to deputy Chief of Staff, Research and Development, Hq USAF, Washington, DC. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0405985

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/405985.pdf

Size: 27 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INTERNATIONAL CONFERENCE ON STATE OF STRESS IN THE EARTH'S CRUST - PREPRINTS OF PAPERS

Personal Author(s):

Judd, W R

Report Date:

May 1963

Media Count:

624 Page(s)

Report Number(s):

RM-3583

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 1963. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0403293

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/403293.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROCEDURES FOR ESTIMATING ELECTRONIC EQUIPMENT COSTS

Descriptive Note:

Memorandum

Personal Author(s):

Early, L B

Barro, S M

Margolis, M A

Report Date:

May 1963

Media Count:

54 Page(s)

Report Number(s):

RAND-RM-3072-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 1963. Other requests shall be referred to Air Force Research and Development Command, Attn: Project Rand, Directorate of Development Planning, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0405682

Full Text (pdf) Availability:

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File: /UL/405682.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE HEURISTIC COMPILER

Personal Author(s):

Simon, Herbert A

Report Date:

May 1963

Media Count:

136 Page(s)

Report Number(s):

RAND-RM-3588-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337013

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DETERMINATION OF THE D-LAYER DISSOCIATIVE RECOMBINATION COEFFICIENT FROM STARFISH X-RAY INDUCED ATTENUATION

Descriptive Note:

Memorandum rept.

Personal Author(s):

LeLevier, R E

Report Date:

May 1963

Media Count:

50 Page(s)

Report Number(s):

RAND/RM-3636PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

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SECRET

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51 - RESTRICTED DATA

Distribution Statement:

Controlling DoD Organization: HQs USAF, Directorate of Development Planning, Deputy Chief of Staff, Research and Development, Attn: Project Rand Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340005

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A POSSIBLE USE OF A THERMONUCLEAR LAND MINE

Descriptive Note:

Memorandum

Personal Author(s):

Heffern, E C

Report Date:

May 1963

Media Count:

47 Page(s)

Report Number(s):

RAND-RM-3590-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 1963. Other requests shall be referred to Deputy Chief of Staff, Research and Development (Air Force), Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337967

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Fireball Chemistry and Fireball Blackout for Low and Intermediate Burst Altitudes.

Personal Author(s):

Gilmore,Forrest R

Report Date:

May 1963

Media Count:

28 Page(s)

Report Number(s):

RM 3571 PR

Contract Number:

F49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0336826

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VALIDATING MAINTENANCE POLICIES AND ESTIMATING LAUNCH CAPABILITY FOR BALLISTIC MISSILES

Personal Author(s):

Kamins,Milton

Report Date:

May 1963

Media Count:

38 Page(s)

Report Number(s):

RM-3645-PR

Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0339348
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) EARLY ESTIMATION OF SLBM HEADING FOR BOOST PHASE INTERCEPTION
Personal Author(s):
Blumenthal,I S
Efron,B
Report Date:
May 1963
Media Count:
30 Page(s)
Report Number(s):
RM3606ARPA
Contract Number:
SD-79
ARPA Order-189-61
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0336056

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REQUIREMENTS FOR AND CAPABILITIES OF A NEXT GENERATION NATO STRIKE FIGHTER

Personal Author(s):

Ellis,J W

Smith,G K

Report Date:

30 Apr 1963

Media Count:

120 Page(s)

Report Number(s):

RM3241PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335785

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RADAR TRAILS AND DISCRIMINATION

Personal Author(s):

ROMIG,M F

LYKOUDIS,P S

Report Date:

30 Apr 1963

Media Count:

39 Page(s)

Report Number(s):

RM-3431-PR
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
ADB252403
Corporate Author:
RAND CORP WASHINGTON DC
Unclassified Title:
(U) Province Rehabilitation and Strategic Hamlet Operations
Descriptive Note:
Status rept. 15-28 Feb 1963
Report Date:
12 Apr 1963
Media Count:
36 Page(s)
Report Number(s):
5-63
XT-DARPA
Monitor Series:
DARPA
Report Classification:
Unclassified
Distribution Limitation(s):
05 - CONTROLLED; DOD CONTROLLED
Distribution Statement:
Distribution: Further dissemination only as directed by Defense Advanced Research Projects Agency,
3701 N. Fairfax Dr., Arlington, VA 22203, Apr 63 or higher DoD authority.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0403414

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/403414.pdf

Size: 31 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET MILITARY STRATEGY

Personal Author(s):

Sokolovskii, V D

Report Date:

Apr 1963

Media Count:

539 Page(s)

Report Number(s):

R-416-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0403418

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/403418.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE COMPOSITE SIMPLEX ALGORITHM: NOTES ON LINEAR PROGRAMMING AND EXTENSIONS - PART 64

Report Date:

Apr 1963

Media Count:

44 Page(s)

Report Number(s):

RM-3579-PR

XC-AFRDC

Contract Number:

AF 49(638)700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0403682

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/403682.pdf

Size: 18 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE ECONOMY OF THE CHINESE MAINLAND: NATIONAL INCOME AND ECONOMIC DEVELOPMENT, 1933-1959, VOLUME 1

Personal Author(s):

Liu, Ta-Chung

Yeh, Kung-Chia

Twanmo, Chong

Report Date:

Apr 1963

Media Count:

449 Page(s)

Report Number(s):

RM-3519-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1963. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of Staff, Research and Development, USAF, 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0400678

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/400678.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE HEATH SM-80 REPAIR SIMULATION ANALYSIS MODEL: VERSATILE AUTOMATIC TEST EQUIPMENT

Personal Author(s):

Gainen, Leon

Voosen, B J

Report Date:

Apr 1963

Media Count:

69 Page(s)

Report Number(s):

RM-3460-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1963. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340007

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SEMI-EMPIRICAL ESTIMATES OF SUPERHARD SURVIVABILITY

Descriptive Note:

Memorandum

Personal Author(s):

Brode, H L

Report Date:

Apr 1963

Media Count:

40 Page(s)

Report Number(s):

RAND-RM-3568-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340077

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DELAYED-GAMMA RAY INDUCED ATTENUATION ON SHOT BLUEGILL

Descriptive Note:

Memorandum

Personal Author(s):

LeLevier, R E

Report Date:

Apr 1963

Media Count:

35 Page(s)

Report Number(s):

RM-3567-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1963. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Washington, DC 20330. Document partially illegible. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0397371

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MEDIUM- AND SHORT-RANGE AIR-TO-SURFACE MISSILES WITH HIGH ACCURACY,

Personal Author(s):

Blakeslee,D J

Report Date:

Apr 1963

Media Count:

41 Page(s)

Report Number(s):

RM-3246-PR

Contract Number:

AF 49(638)-700

Report Classification:

SECRET

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution: Controlled: all requests to Hq., USAF, Deputy Chief of Staff, Research and Development, Directorate of Operational Requirements and Development Plans, Washington, D. C. 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0404532

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/404532.pdf

Size: 5 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PUBLICATIONS OF THE RAND LOGISTICS DEPARTMENT

Descriptive Note:

Memorandum

Personal Author(s):

Mendershausen, Horst

Report Date:

Apr 1963

Media Count:

115 Page(s)

Report Number(s):

RAND-RM-2155-5

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1963. Other requests shall be referred to Air Force Research Development Command, Attn: Rand Project, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337069

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/337069.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COST EFFECTIVENESS OF AICBM FOR THE DEFENSE OF ICBM SITES. PART 3

Descriptive Note:

Memorandum

Personal Author(s):

Burke, T F

Report Date:

Apr 1963

Media Count:

27 Page(s)

Report Number(s):

RAND-RM-3515-ARPA-P-3

XD-DARPA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

DARPA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1963. Other requests shall be referred to Defense Advanced Research Projects Agency, Attn: ASBD-TIO, 3701 North Fairfax Dr., Arlington, VA 22203-1714.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0457151

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRELIMINARY PROGRESS REPORT ON THE RAND SST STUDY AS PRESENTED TO THE SUPERSONIC TRANSPORT ADVISORY GROUP ON MARCH 5, 1963,

Personal Author(s):

Johnston,R B

Report Date:

Apr 1963

Media Count:

7 Page(s)

Report Number(s):

RM3607-FAA

Contract Number:

AF49 638 1199

Report Classification:

Unclassified

Distribution Limitation(s):

13 - U.S. GOVT. ONLY; NON-DOD CONTROLLED

Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified request-ers shall obtain release approval from SupersonicTransport Program Div., Federal Aviation Agency, Washington, D. C. 20553.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337308

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/337308.pdf

Size: 304 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A NOTE ON OPTIMAL BUDGET ALLOCATION TO HARD AND SOFT MISSILE SITES

Descriptive Note:

Memorandum rept.

Personal Author(s):

Johnson, Selmer M

Report Date:

Apr 1963

Media Count:

16 Page(s)

Report Number(s):

ARPA-RM-3552

XD-RM-3552

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

RM-3552

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1963. Other requests shall be referred to Advanced Research Projects Agency, Arlington, VA.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335748

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELATING THE U. S. AND SU GENERAL-WAR FORCES TO THEIR STRATEGIC OBJECTIVES AND BUDGETS: CASE C (OF SIX CASE STUDIES)

Personal Author(s):

LAVIN,M M

THURNEYSSEN,J S

Report Date:

Apr 1963

Media Count:

75 Page(s)

Report Number(s):

RM-3461-PR

Contract Number:

AF49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0336178

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPROXIMATE ANALYSIS OF FORWARD- AND REARWARD FIRING ASM'S FOR LOW-ALTITUDE LAUNCH

Personal Author(s):

Blakeslee,D J

Report Date:

Apr 1963

Media Count:

37 Page(s)

Report Number(s):

RM3262-PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341979

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COST ANALYSIS OF TWO MODIFIED RS-70 AIR- LAUNCHED BOOSTER SYSTEMS

Personal Author(s):

Campbell,H G

Noah,J W

Report Date:

Apr 1963

Media Count:

29 Page(s)

Report Number(s):

RM3458PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335747

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELATING THE U. S. AND SU GENERAL-WAR FORCES TO THEIR STRATEGIC OBJECTIVES AND BUDGETS: CASE B (OF SIX CASE STUDIES)

Personal Author(s):

LAVIN,M M

Report Date:

Apr 1963

Media Count:

75 Page(s)

Report Number(s):

RM-3315-PR

Contract Number:

AF49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0336027

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ENGINEERING ANALYSIS AND MODEL TESTS OF A SUBMERSIBLE PLATFORM FOR OPERATION IN SHALLOW WATER

Personal Author(s):

Rumble, Henry P

Johnson , Roger P

Report Date:

Apr 1963

Media Count:

90 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337003

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COST EFFECTIVENESS OF AICBM FOR THE DEFENSE OF ICBM SITES, PART 2

Personal Author(s):

Burke, T F

Report Date:

Apr 1963

Media Count:

26 Page(s)

Report Number(s):

RAND/RM-3515-ARPA-PT-2

XD-ARPA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

ARPA

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Defense Advanced Research Projects Agency, 3701 N. Fairfax Dr.,
Arlington, VA 22203-1714.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335750

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELATING THE U. S. AND SU GENERAL-WAR FORCES TO THEIR STRATEGIC OBJECTIVES AND BUDGETS: CASE E (OF SIX CASE STUDIES)

Personal Author(s):

LAVIN,M M

Report Date:

Apr 1963

Media Count:

75 Page(s)

Report Number(s):

RM-3470-PR

Contract Number:

AF49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335751

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELATING THE U.S. AND SU GENERAL-WAR FORCES TO THEIR STRATEGIC OBJECTIVES AND BUDGETS: CASE F (OF SIX CASE STUDIES)

Personal Author(s):

LAVIN,M M

Report Date:

Apr 1963

Media Count:

99 Page(s)

Report Number(s):

Rm-3471-PR

Contract Number:

AF49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335952

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELATING THE U.S. AND SU GENERAL-WAR FORCES TO THEIR STRATEGIC OBJECTIVES AND BUDGETS:
CASE A (OF SIX CASE STUDIES)

Personal Author(s):

Kao,R C

Report Date:

Apr 1963

Media Count:

71 Page(s)

Report Number(s):

RM3542PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335749

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELATING THE U. S. AND SU GENERAL-WAR FORCES TO THEIR STRATEGIC OBJECTIVES AND BUDGETS: CASE D (OF SIX CASE STUDIES)

Personal Author(s):

WILDHORN,SORRELL

Report Date:

Apr 1963

Media Count:

91 Page(s)

Report Number(s):

RM-3394-PR

Contract Number:

AF49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0336191

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FEASIBILITY OF AN AIR-BORNE RADAR TO MAKE ACCURATE RANGE AND RANGE-RATE MEASUREMENTS ON SUBMARINE-LAUNCHED BALLISTIC MISSILES

Personal Author(s):

ENDALL,William B

Report Date:
Apr 1963
Media Count:
39 Page(s)
Report Number(s):
RM3555ARPA
Contract Number:
SD79
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0405688
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/405688.pdf
Size: 593 KB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) NUCLEAR FORCES AND THE FUTURE OF NATO
Personal Author(s):
Vandevanter, Jr, E
Report Date:
Apr 1963
Media Count:
21 Page(s)
Report Number(s):
RAND-P-2739
XC-AFRDC
Monitor Series:
AFRDC
Report Classification:
Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0405800

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/405800.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME METHODS FOR DETERMINING THE MOST VITAL LINK IN A RAILWAY NETWORK

Personal Author(s):

Wollmer, Richard D

Report Date:

Apr 1963

Media Count:

40 Page(s)

Report Number(s):

RAND-RM-3321-ISA

XD-OASD/ISA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

OASD/ISA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1963. Other requests shall be referred to Assistant Secretary of Defense (International Security Affairs), Washington, DC. 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0403834

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/403834.pdf

Size: 15 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE ECONOMY OF THE CHINESE MAINLAND: NATIONAL INCOME AND ECONOMIC DEVELOPMENT, 1933-1959 VOLUME 2 (APPENDIXES)

Descriptive Note:

Memorandum

Personal Author(s):

Liu, Ta-Chung

Yeh, Kung-Chia

Twanmo, Chong

Report Date:

Apr 1963

Media Count:

516 Page(s)

Report Number(s):

RM-3519-PR-VOL-2

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1963. Other requests shall be referred to Air Force Research Development Command, Attn: Project RAND, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0336485

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WEAPON SYSTEMS COST ESTIMATES OF THE PENETRATING MANNED BOMBER STUDY.

Report Date:

Apr 1963

Media Count:

57 Page(s)

Report Number(s):

RM-3073-PR

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only government agencies may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0408119

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/408119.pdf

Size: 5 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) FEDERAL MARITIME POLICY AND MILITARY SHIPPING REQUIREMENTS

Descriptive Note:

Memorandum

Personal Author(s):

Rapping, L A

Report Date:

Apr 1963

Media Count:

107 Page(s)

Report Number(s):

RAND-RM-3422-ISA

XD-OASD/ISA

Contract Number:

ARPA-ORDER-189-61

SD-79

Monitor Series:

OASD/ISA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1963. Other requests shall be referred to Defense Advanced Research Projects Agency, Arlington, VA.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0336425

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FACTORS AFFECTING THE ACCURACY OF A MID-COURSE SLBM INTERCEPT SYSTEM

Personal Author(s):

Blumenthal, I S

Report Date:

Apr 1963

Media Count:

27 Page(s)

Report Number(s):

RM3616ARPA

Contract Number:

SD79

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0409554

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/409554.pdf

Size: 13 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MATHEMATICAL OPTIMIZATION TECHNIQUES

Personal Author(s):

Bellman, Richard

Report Date:

Apr 1963

Media Count:

347 Page(s)

Report Number(s):

R-396-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1963. Other requests shall be referred to Deputy Chief of Staff, Research and Development (Air Force), Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335056

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECT OF VARIABLE SWEEP ON THE LOITER AND CRUISE CAPABILITY OF A MACH 3.0 LONG-RANGE INTERCEPTOR

Personal Author(s):

WEBER,C M JR

Report Date:

31 Mar 1963

Media Count:

10 Page(s)

Report Number(s):

RM-3419-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335196

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A LOW-ALTITUDE-CRUISE TERMINAL-DELIVERY SYSTEM FOR INTERCONTINENTAL MISSILES

Personal Author(s):

SMITH,G K

Report Date:

31 Mar 1963

Media Count:

19 Page(s)

Report Number(s):

RM-3450-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335094

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRELIMINARY STUDY OF RADAR RETURN FROM BLAST AREAS

Personal Author(s):

LAMAR,DONALD L

Report Date:

31 Mar 1963

Media Count:

17 Page(s)
Report Number(s):
PM-3457-PR
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0335101
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) TACTICAL AIRCRAFT FOR LIMITED WAR
Personal Author(s):
SCHAMBERG,R
Report Date:
31 Mar 1963
Media Count:
21 Page(s)
Report Number(s):
RM-3545-PR
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340004

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BIG PAYLOADS VERSUS BALLISTIC MISSILE DEFENSE

Descriptive Note:

Memorandum

Personal Author(s):

Latter, A L

Report Date:

Mar 1963

Media Count:

23 Page(s)

Report Number(s):

RAND-RM-3556-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; MAR 1963. Other requests shall be referred to Deputy Chief of Staff, Research and Development (Air Force), Washington, DC 20330.

Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0299700

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) ON SYNCHRONIZATION IN COMMUNICATION THEORY
Personal Author(s):
REED, I S
Report Date:
Mar 1963
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0335071
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) MILITARY ASPECTS OF A STUDY OF THE IMPLICATIONS OF A COMMUNIST CHINESE NUCLEAR
CAPABILITY
Descriptive Note:
Memorandum rept.
Personal Author(s):
Jaeger, B F
Weiner, M
Report Date:
Mar 1963
Media Count:
100 Page(s)
Report Number(s):
RAND/RM-3418-PR
XC-USAF
Contract Number:
AF 49(638)-700
Monitor Series:
USAF

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution: Further dissemination only as directed by DIRECTORATE OF DEVELOPMENT PLANNING,
DEPUTY CHIEF OF STAFF, RESEARCH AND DEVELOPMENT, HQ, USAF, WASHINGTON, DC;5 MAR 99 or
higher DoD authority.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335644

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUGGESTIONS FOR PLANNING DEVELOPMENTS IN SURVEILLANCE

Personal Author(s):

CARPENTER,M B

CATLETT,L E

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337337

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RECENT NUCLEAR EFFECTS TESTS AND FUTURE REQUIREMENTS

Descriptive Note:

Memorandum rept.

Personal Author(s):

McMillan, W G

Latter, A L

Report Date:

Mar 1963

Media Count:

36 Page(s)

Report Number(s):

RAND/RM-3572-ARPA

XD-ARPA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

ARPA

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

51 - RESTRICTED DATA

Distribution Statement:

Controlling DoD Organization: Defense Advanced Research Projects Agency, 3701 N. Fairfax Dr.,
Arlington, VA 22203-1714. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335502

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) JAPAN AND CHINESE NUCLEAR POWER

Personal Author(s):

LANGER,PAUL F

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0401485

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/401485.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE KREMLIN'S HORIZON

Descriptive Note:

Memorandum

Personal Author(s):

Leites, Nathan

Report Date:

Mar 1963

Media Count:

49 Page(s)

Report Number(s):

RAND-RM-3506-ISA

XD-OASD/ISA

Contract Number:

ARPA ORDER 189-61

SD-79

Monitor Series:

OASD/ISA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAR 1963. Other requests shall be referred to Office of the Assistant Secretary of Defense, Attn: International Security Affairs, Washington, DC 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0400122

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/400122.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET DOCTRINE ON DEVELOPING COUNTRIES: SOME DIVERENT VIEWS

Personal Author(s):

Dinerstein, Herbert S

Report Date:

Mar 1963

Media Count:

28 Page(s)

Report Number(s):

P-2725

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAR 1963. Other requests shall be referred to Deputy Chief of Staff Research and Development, Attn: AF, Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335301

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METHODS FOR IMPROVING COORDINATION BETWEEN ECONOMIC AND MILITARY AID PROGRAMS

Personal Author(s):

WOLF,CHARLES JR

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0400273

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/400273.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE HEATH SM-80 REPAIR SIMULATION ANALYSIS MODEL: PECULIAR TEST EQUIPMENT

Personal Author(s):

Gainen, Leon

Voosen, B J

Report Date:

Mar 1963

Media Count:

65 Page(s)

Report Number(s):

RM-3459-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAR 1963. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of Staff, Research and Technology, Washington, DC 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0401547

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/401547.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE QUANTUM ELECTRODYNAMICS OF A MEDIUM

Personal Author(s):

Yura, H T

Report Date:

Mar 1963

Media Count:

88 Page(s)

Report Number(s):

R-410-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAR 1963. Other requests shall be referred to Air Force Research and Development Command, Attn: Development and Planning, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0403327

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/403327.pdf

Size: 886 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COMMODITY POLICY AND ECONOMIC DEVELOPMENT

Personal Author(s):

Pincus, John A

Report Date:

Mar 1963

Media Count:

26 Page(s)

Report Number(s):

RAND-P-2720

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAR 1963. Other requests shall be referred to Air Force Research and Development Command, Attn: Rand Project, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0299486

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE NONNEGATIVITY OF GREEN'S FUNCTIONS

Personal Author(s):

BELLMAN,RICHARD

Report Date:

Mar 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340169

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PARAMETRIC-DESIGN AND COST-ESTIMATION MODELS OF SUPERHARD CONTROL CENTERS

Personal Author(s):

Genensky, Samuel M

Sandoval, Charles A

Report Date:

Mar 1963

Media Count:

73 Page(s)

Report Number(s):

RM3451PR

XC-AC2ISRC

Contract Number:

AF49(638)-700

Monitor Series:

AC2ISRC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAR 1963. Other requests shall be referred to Aerospace Command Control Intelligence Surveillance and Reconnaissance Center, Langley AFB, VA. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0296596

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/296596.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RAND PUBLICATIONS ON RELIABILITY

Descriptive Note:

Research memo.

Personal Author(s):

Stoller, David S

Report Date:

Feb 1963

Media Count:

33 Page(s)

Report Number(s):

RM-2613-1

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; FEB 1963. Other requests shall be referred to Deputy Chief of Staff for Research and Technology, Directorate of Development Planning, Department of the Air Force, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0297827

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HAS THE SUKARNO REGIME WEAKENED THE PKI

Personal Author(s):

PAUKER,EWA T

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0297923

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MATHEMATICAL MODEL OF DRUG DISTRIBUTION IN THE BODY: IMPLICATIONS FOR CANCER
CHEMOTHERAPY

Personal Author(s):

BELLMAN,RICHARD

JACQUEZ,JOHN

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341101

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CHARACTERISTICS OF A FAMILY OF NUCLEAR-RAMJET REACTORS AND PROPULSION SYSTEMS

Personal Author(s):

Krase,W H

Report Date:

Feb 1963

Media Count:

31 Page(s)

Report Number(s):

Memo. RM3135PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0296105

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/296105.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Foreign Participation in Communications Satellite Systems: Implications of the Communications Satellite Act of 1962

Personal Author(s):

SCHWARTZ, MURRAY L

GOLDSEN, JOSEPH M

Report Date:

Feb 1963

Media Count:

96 Page(s)

Report Number(s):

RM-3484-RC

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; FEB 1963. Other requests shall be referred to Department of Defense, ATTN: Public Affairs Office, Washington, DC 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0297421

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A FIRST REACTION TO THE NEW SOVIET BOOK MILITARY STRATEGY

Personal Author(s):

WOLFE, THOMAS W

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0296817

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NATIONAL STRATEGY IMPLICATIONS FOR COMMAND AND CONTROL

Personal Author(s):

LEVIEN,ROGER E

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0334826

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SAFE: A STRATEGY-AND-FORCE-EVALUATION GAME

Personal Author(s):

RODRIGUEZ,THELMA

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0334807

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LOW-ALTITUDE INTERCONTINENTAL BOMBERS WITH SHORT AND VERTICAL TAKE-OFF CAPABILITY

Personal Author(s):

CARTAINO,T F

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0380564

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF PROTOTYPES IN DEVELOPMENT,

Personal Author(s):

Klein,B H

Glennan,T K , Jr

Shubert,G H
Report Date:
Feb 1963
Media Count:
31 Page(s)
Report Number(s):
RM-3467-PR
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0402990
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/402990.pdf
Size: 206 KB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) A NOTE ON SOME NOXIOUS ALTERNATIVES
Personal Author(s):
Ferguson, Allen R
Report Date:
Feb 1963
Media Count:
5 Page(s)
Report Number(s):
RAND-P-2710
XD-DOD
Monitor Series:
DOD
Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; FEB 1963. Other requests shall be referred to Department of Defense, Attn: Information Security Management, Washington, DC 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0402287

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/402287.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BRITISH-AMERICAN COLLABORATION ON THE A-BOMB IN WORLD WAR II

Personal Author(s):

DeWeerd, H A

Report Date:

Feb 1963

Media Count:

32 Page(s)

Report Number(s):

RAND-P-2707

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338820

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Summary of a Study on Application of Skybolt to Satellite Interception

Descriptive Note:

Memorandum rept.

Personal Author(s):

Morris, Deane N

Report Date:

Feb 1963

Media Count:

22 Page(s)

Report Number(s):

RAND/RM-3464-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; FEB 1963. Other requests shall be referred to Deputy Chief of Staff Research and Technology (Air Force), Directorate of Development Planning, Attn: RAND Project Office, Washington, DC. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0449100

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAN IN A LARGE INFORMATION-PROCESSING SYSTEMHIS CHANGING ROLE IN SAGE,

Personal Author(s):

Kristy,N F

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Number(s):

RM3206PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0403131

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/403131.pdf

Size: 835 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INFORMATION REQUIREMENT PROBLEMS FOR ARMY FORCE STRUCTURE COST ANALYSIS

Personal Author(s):

Meltsner, A J

Report Date:

Feb 1963

Media Count:

24 Page(s)

Report Number(s):

RM-3468-ASDC

XC-AFRDC

Contract Number:

SD-83

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; FEB 1963. Other requests shall be referred to Office of the Assistant Secretary of Defense/Comptroller, Washington, DC 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337250

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/337250.pdf

Size: 521 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RADIO WAVE ABSORPTION CONTOURS FROM GAMMA IONIZATION FROM LOW-ALTITUDE NUCLEAR BURSTS

Descriptive Note:

Memorandum rept.

Personal Author(s):

Crain, C M

Report Date:

Feb 1963

Media Count:

32 Page(s)

Report Number(s):

ARPA-RM-3499

XD-RM-3499

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

RM-3499

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; FEB 1963. Other requests shall be referred to Advanced Research Projects Agency, Arlington, VA.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337765

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SATELLITE INTERCEPTION WITH SKYBOLT,

Personal Author(s):

Morris,Deane N

Report Date:

Feb 1963

Media Count:

85 Page(s)

Report Number(s):

RM3311 PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0403769

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/403769.pdf

Size: 633 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GRADIENT SCATTERING FROM MISSILE WAKES

Personal Author(s):

Kirkwood, R L

Report Date:

Feb 1963

Media Count:

24 Page(s)

Report Number(s):

RM-3466-ARPA

XD-ARPA

Contract Number:

SD-79

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; FEB 1963. Other requests shall be referred to Advanced Research Projects Agency, Arlington, VA 33309.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337268

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RADIO WAVE ABSORPTION FROM NUCLEAR BURSTS BELOW 35 KM

Descriptive Note:

Memorandum rept.

Personal Author(s):

Crain, C M

Report Date:

Feb 1963

Media Count:

58 Page(s)

Report Number(s):

RAND/RM-3498-ARPA

XD-ARPA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

ARPA

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Controlling DoD Organization: Defense Advanced Research Projects Agency, 3701 N. Fairfax Dr.,
Arlington, VA 22203-1714. Formerly Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0334399

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE PROSPECTS FOR SOME ULTRAVIOLET DETECTION SYSTEMS

Personal Author(s):

GELINAS, R W

Report Date:

Feb 1963

Media Count:

39 Page(s)

Report Number(s):

RM-3483-PR

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335293

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/335293.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET POLICIES AND CHINESE NUCLEAR POWER

Personal Author(s):

GOURE, LEON

Report Date:

Feb 1963

Media Count:

46 Page(s)

Report Number(s):

RAND-RM-3448-PR

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; FEB 1963. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0334452

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ENGINEERING ANALYSIS OF MODEL TESTS OF SUBMERSIBLE MISSILE-LAUNCHING PLATFORMS

Personal Author(s):

JOHNSON,ROGER P

RUMBLE,HENRY P

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335363

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SAC WARTIME SORTIE GENERATION AND BOMBER RECOVERY THROUGH DISPERSED OPERATIONS

Personal Author(s):

MURROW,R B

DUDLEY,V S

Report Date:

Feb 1963

Media Count:

71 Page(s)

Report Number(s):

RM-3175-PR

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0334633

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/334633.pdf

Size: 6 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GENERAL DESIGN CONSIDERATIONS FOR SELF-CONTAINED UNDERGROUND POWER SYSTEMS

Personal Author(s):

ZIMMERMAN, R H

JUDD, W R

Report Date:

Feb 1963

Media Count:

185 Page(s)

Report Number(s):

RM-3033-PR

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Feb 1963. Other requests shall be referred to United States Air Force, Deputy Chief of Staff, Research and Development, Washington, Dc 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335796

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POSSIBLE LIMITS ON RADAR RESOLUTION SET BY ATMOSPHERIC PHASE ERRORS

Personal Author(s):

BAILEY, H H

FLECK, C Y

KIRKWOOD, R L

Report Date:

Feb 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0336715

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COST EFFECTIVENESS OF AICBM FOR THE DEFENSE OF ICBM SITES. PART I

Personal Author(s):

Burke,T F

Report Date:

Feb 1963

Media Count:

31 Page(s)

Report Number(s):

RM3515 ARPA

Contract Number:

SD79

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0334347

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/334347.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A COMPARISON OF GROUND-LAUNCHED AND AIR-LAUNCHED BOOSTERS FOR SATELLITE-RENDEZVOUS MISSIONS

Descriptive Note:

Memorandum rept.

Personal Author(s):

ROSENZWEIG, H

Report Date:

Jan 1963

Media Count:

50 Page(s)

Report Number(s):

RAND/RM-3300-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JAN 1963. Other requests shall be referred to Deputy Chief of Staff, Research and Technology (Air Force), Directorate of Development Planning, Attn: Project Rand Group, Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0334252

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RECONNAISSANCE FROM AIR-LAUNCHED SATELLITE SYSTEMS

Descriptive Note:

Memorandum rept.

Personal Author(s):

DAVIES, M E

MURRAY, B C

Report Date:

Jan 1963

Media Count:

15 Page(s)

Report Number(s):

RAND/RM-3496-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff Research and Technology, USAF, Directorate of Development Planning, Attn: RAND Project Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0334147

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) WHAT IS AEROSPACEPLANE?

Descriptive Note:

Memorandum rept.

Personal Author(s):

ROSENZWEIG, H

Report Date:

Jan 1963

Media Count:

45 Page(s)

Report Number(s):

RAND/RM-3252-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff, Research and Technology (Air Force), Directorate of Development Planning, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0295148

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/295148.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TABLES OF MIE SCATTERING CROSS SECTIONS AND AMPLITUDES

Personal Author(s):

DEIRMENDJIAN, D

Report Date:

Jan 1963

Media Count:

42 Page(s)

Report Number(s):

R-407-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JAN 1963. Other requests shall be referred to Deputy Chief of Staff for Research and Technology, Directorate of Development Planning, Department of the Air Force, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0295149

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/295149.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TOTAL SYSTEM COST ANALYSIS. PART 1

Descriptive Note:

Research memo.

Personal Author(s):

PETRUSCHELL, R L

CHESTER, J M

Report Date:

Jan 1963

Media Count:

85 Page(s)

Report Number(s):

RM-3069-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0295563

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/295563.pdf

Size: 502 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A NEURAL NET FOR CONSUMMATORY BEHAVIOR

Personal Author(s):

Paxson, E W

Barr, Irwin

Report Date:

Jan 1963

Media Count:

21 Page(s)

Report Number(s):

RM-3393-PR

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JAN 1963. Other requests shall be referred to Directorate of Development Planning, Research and Technology (Air Force), Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0334314

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/334314.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TECHNICAL ASPECTS OF POSSIBLE CHINESE MEDIUM-RANGE BALLISTIC MISSILES

Descriptive Note:

Memorandum rept.

Personal Author(s):

MORRIS, DEANE N

Report Date:

Jan 1963

Media Count:

45 Page(s)

Report Number(s):

RAND/RM-3356-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JAN 1963. Other requests shall be referred to Deputy Chief of Staff Research and Technology (Air Force), Directorate of Development Planning, Attn: Project RAND Group, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0334148

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/334148.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ESTIMATES OF THE SONIC BOOM DUE TO POSSIBLE AIR-LAUNCH BOOSTER SYSTEMS

Descriptive Note:

Research memo.

Personal Author(s):

Krase, W H

Report Date:

Jan 1963

Media Count:

51 Page(s)

Report Number(s):

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JAN 1963. Other requests shall be referred to Office of the Deputy Chief of Staff for Research and Technology, Directorate of Development Planning, Department of the Air Force, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0386797

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE STRATEGIC IMPLICATIONS OF SOVIET MILITARY AID TO INDONESIA,

Personal Author(s):

Pauker, Guy J

Report Date:

Jan 1963

Media Count:

109 Page(s)

Report Number(s):

RM-3481-1-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: USGO: others to Hq., USAF, Deputy Chief of Staff, Research and Development, Directorate of Operational Requirements and Development Plans, Washington, D. C. 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339555

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A SUGGESTED METHOD OF EXPLOITING SOVIET DATA FOR TARGET INTELLIGENCE

Descriptive Note:

Memorandum rept.

Personal Author(s):

Hoeffding, Oleg

Report Date:

Jan 1963

Media Count:

25 Page(s)

Report Number(s):

RAND/RM-3435-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; JAN 1963. Other requests shall be referred to Deputy Chief of Staff Research and Technology (Air Force), Directorate of Development Planning, Attn: RAND Project Office, Washington, DC. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0457249

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RAND ACTIVITIES ON SUPERSONIC TRANSPORT STUDY DURING MAY AND JUNE 1963.

Descriptive Note:

Final rept.

Report Date:

Jan 1963

Media Count:

2 Page(s)

Report Number(s):

AR-85-FAA

Contract Number:

AF49 638 1199

Report Classification:

Unclassified

Distribution Limitation(s):

13 - U.S. GOVT. ONLY; NON-DOD CONTROLLED

Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified re-questers shall obtain release approval from Office of Supersonic Transport Div., Federal Aviation Agency, Washington, D. C. 20553

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338902

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ONE ASPECT OF VERY-LARGE-YIELD ICBMS AS A COUNTER TO EFFECTIVE TERMINAL AICBM

Descriptive Note:

Research memo.

Personal Author(s):

Graham, W B

Report Date:

Jan 1963

Media Count:

49 Page(s)

Report Number(s):

RAND/RM-3500-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JAN 1963. Other requests shall be referred to Deputy Chief of Staff Research and Technology (Air Force), Directorate of Development Planning, Attn: Project RAND Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0335474

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANTI-SATELLITE CAPABILITIES OF A RUSSIAN RADAR

Personal Author(s):

BLUMENTHAL, I S

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0299506

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COUNTERINSURGENCY: A SYMPOSIUM - APRIL 16-20, 1962

Personal Author(s):

HOSMER,S T

CRANE,S O

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0299065

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DIFFERENTIAL-DIFFERENCE EQUATIONS

Personal Author(s):

BELLMAN,RICHARD

COOKE,KENNETH L

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0296249

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TACTICS IN A LOCAL CRISIS

Personal Author(s):

FERGUSON, ALLEN R

Report Date:

Jan 1963

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0295652

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/295652.pdf

Size: 879 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE BRITISH EFFORT TO SECURE AN INDEPENDENT DETERRENT 1952-1962

Personal Author(s):

DeWeerd, H A

Report Date:

Jan 1963

Media Count:

24 Page(s)

Report Number(s):

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JAN 1963. Other requests shall be referred to Department of Defense, ATTN: Public Affairs Office, Washington, DC 20301. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341542

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) (NO TITLE).

Descriptive Note:

Semiannual progress rept. no. 7, 1 July31 Dec 62.

Report Date:

Jan 1963

Media Count:

37 Page(s)

Contract Number:

SD-79

ARPA Order-189-1

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0295564

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/295564.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE RELATIONSHIP OF RESOURCE DEMANDS TO AIRBASE OPERATIONS

Descriptive Note:

Research memorandum

Personal Author(s):

Campell, Harrison S

Report Date:

Jan 1963

Media Count:

46 Page(s)

Report Number(s):

RM-3428-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JAN 1963. Other requests shall be referred to Deputy Chief of Staff Research and Development, Department of the Air Force, Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0296066

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/296066.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME EXAMPLES OF THE BRIGHTER VIEW OF EASTWEST RELATIONS

Descriptive Note:

Research memorandum

Personal Author(s):

LEITES, NATHAN

Report Date:

Jan 1963

Media Count:

69 Page(s)

Report Number(s):

RM-3362-ISA

XD-OASD/ISA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

OASD/ISA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use;
JAN 1963. Other requests shall be referred to Office of the Assistant Secretary of Defense for
International Security Affairs, Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0292986

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE APPLICATION OF DYNAMIC PROGRAMMING TO SATELLITE INTERCEPT AND RENDEZVOUS
PROBLEMS

Personal Author(s):

SMITH,F T

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0445915

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SEEING THROUGH THE ATMOSPHERE-PROCEEDINGS OF A SYMPOSIUM,

Personal Author(s):

Heffern,E C

Report Date:
Dec 1962
Media Count:
89 Page(s)
Report Number(s):
RM3294PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0333874
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) AN OPERATIONS MODEL FOR ESTIMATING THE EFFECTIVENESS AND ATTRITION OF TACTICAL
AIRCRAFT WHEN PENETRATING DEFENSES AT LOW ALTITUDE
Personal Author(s):
GREEN, J R
MARTIN, R H
Report Date:
Dec 1962
Media Count:
49 Page(s)
Report Number(s):
RM-3295-PR
Contract Number:
AF 49(638)-700
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED
23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0333712

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MILITARY SPACE ACTIVITIES AND THE COLD WAR

Personal Author(s):

GOLDSEN,JOE M

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0333728

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A STUDY OF THE IMPLICATIONS OF A COMMUNIST CHINESE NUCLEAR CAPABILITY

Personal Author(s):

BLACHLY, R L

WEINER, M G

Report Date:

Dec 1962

Media Count:

95 Page(s)

Report Number(s):

RAND/R-411-PR

XC-USAF

Contract Number:

AF 49(638)-700

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USAF

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Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution: Further dissemination only as directed by U.S. Air Force, Public Affairs Office, Washington, DC; 4 Feb 99 or higher DoD authority.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340410

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BROADER VIEW OF SOME AIR DEFENSE DECISIONS: NOTES FOR A DISCUSSION

Personal Author(s):

Digby,James F

Report Date:

Dec 1962

Media Count:

33 Page(s)

Report Number(s):

RM-3407-PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
51 - RESTRICTED DATA
Distribution Statement:
Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0334225
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/334225.pdf
Size: 2 MB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) GUIDANCE PROBLEMS INVOLVED IN LOW ALTITUDE DEFENSE
Descriptive Note:
Memorandum rept.
Personal Author(s):
HUTCHESON, J H
BURKHART, J A
Report Date:
Dec 1962
Media Count:
88 Page(s)
Report Number(s):
RAND/RM-3424-ARPA
XD-ARPA
Contract Number:
ARPA ORDER-189-61
Monitor Series:
ARPA
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use;
DEC 1962. Other requests shall be referred to Defense Advanced Research Projects Agency, 3701 N.
Fairfax Dr., Arlington, VA 22203-1714.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0294599

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TARGET-SEARCH CAPABILITY OF A HUMAN OBSERVER IN HIGH-SPEED FLIGHT

Personal Author(s):

DUGAS,DORIS J

Report Date:

Dec 1962

Media Count:

31 Page(s)

Report Number(s):

RM-3226-PR

Contract Number:

AF49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0296926

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND DIFFUSE REFLECTION OF RADIATION DUE TO A DISTRIBUTED POINT
SOURCE-I AND II

Personal Author(s):

BELLMAN,RICHARD

KALABA,ROBERT

UENO,SUEO

Report Date:

Dec 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0333065

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMAND, CONTROL, AND COMMUNICATIONS FOR MANNED BOMBERS

Personal Author(s):

NORTHROP,G M

Report Date:

Nov 1962

Media Count:

68 Page(s)

Report Number(s):

RM-3257-PR

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0373593

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NEW WEAPONS AND THE ARAB-ISRAEL CONFLICT

Personal Author(s):

Lubell, Harold

Report Date:

Nov 1962

Media Count:

221 Page(s)

Report Number(s):

RM-3102-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; NOV 1962. Other requests shall be referred to Deputy Chief of Staff, Research and Development, Directorate of Operational Requirements and Development Plans, Attn: AFRDQ-R, Washington, DC 20330. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0333060

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EXAMINATION OF THE COMMUNICATIONS FOR A PROPOSED NUCLEAR TEST BAN CONTROL SYSTEM

Personal Author(s):

MARTIN,L G

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0333159

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Consideration of an Over-the-Horizon System for the Detection of ICBM Launches.

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0380425

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AICBM POTENTIALITIES OF AN EXISTING RUSSIAN RADAR,

Personal Author(s):

Blumenthal,I S

Report Date:

Nov 1962

Media Count:

30 Page(s)

Report Number(s):

RM-3387-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339340

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ELECTRON TRAPPING FROM KINGFISH,

Personal Author(s):

McMillan,W G

Report Date:

Nov 1962

Media Count:

21 Page(s)

Report Number(s):

RM3417ARPA

Contract Number:

SD79

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Notice: RESTRICTED DATA. Release or announce-ment to foreign governments or their nationals isnot authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0332910

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DISCUSSION OF MANNED BOMBER PENETRATION MEASURES FOR THE 1960S

Personal Author(s):

TATUM,F A

Report Date:

Nov 1962

Media Count:

137 Page(s)

Report Number(s):

RM-3299-PR

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0333059

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SUGGESTIONS FOR AN AIR FORCE SPACE PROGRAM: A REPORT OF A RAND AD HOC GROUP

Personal Author(s):

BUCHHEIM, R W

KLEIN, B H

Report Date:

Nov 1962

Media Count:

1 Page(s)

Contract Number:

AF-49-638-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0373600

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/373600.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DESIGN CHARACTERISTICS FOR A FAMILY OF MICROMISSILES,

Personal Author(s):

Schaffer, M B

Report Date:

Nov 1962

Media Count:

62 Page(s)

Report Number(s):

RM-3240-ARPA

XD-DARPA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

DARPA

Report Classification:

Unclassified

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03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; NOV 1962. Other requests shall be referred to Defense Advanced Research Projects Agency, DARPA/TIO Arlington, VA 22209.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0291806

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIMSCRIPT: A SIMULATION PROGRAMMING LANGUAGE

Personal Author(s):

MARKOWITZ,H M

HAUSNER,B

KARR,H W

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0289853

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ACCOUNTING IMPLICATIONS OF THE NEW PROGRAMMING PROCESS IN DOD

Personal Author(s):

MCCLLENON,P R

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0290473

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REFLECTIONS ON THE ROLE OF AIR TRANSPORT IN THE HARMONIOUS EVOLUTION OF
UNDERDEVELOPED COUNTRIES

Personal Author(s):

JODEAU,JACQUES

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0291247

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PITFALLS IN MILITARY SYSTEMS ANALYSIS

Personal Author(s):

QUADE, E S

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0333560

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMAND AND CONTROL IMPLICATIONS OF CONTROLLED RESPONSE

Personal Author(s):

MCGARVEY,DAVID C

Report Date:

Nov 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0380560

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PRELIMINARY APPRAISAL OF MOBILE MISSILES FOR NATO,

Personal Author(s):

Hoag,Malcolm W

Report Date:

Nov 1962

Media Count:

55 Page(s)

Report Number(s):

RM-3409-ISA

Contract Number:

SD-79

ARPA

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution: USGO: others to Assistant Secretary of Defense. Attn: International Security Affairs,
Washington, D. C. 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

ADD505052

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONSIDERATION OF AN OVER-THE-HORIZON SYSTEM FOR THE DETECTION OF ICBM LAUNCHES

Personal Author(s):

SELIN,I

Report Date:

Nov 1962

Media Count:

59 Page(s)

Report Number(s):

RM-3352-PR

Contract Number:

AF-49(638)-700

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

NL, AIR FORCE DIR. OF DEVELOPMENT PLANNING

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0332243

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AIR LAUNCHED BOOSTERS FOR SINGLE-PASS RECONNAISSANCE-SATELLITE OPERATIONS

Personal Author(s):

ROSENZWEIG,H

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0332590

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MULTIPLE PAYLOAD ICBM DELIVERY CAPABILITY USING EXPLICIT GUIDANCE

Personal Author(s):

GORDON,GEORGE

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0332297

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRAJECTORIES FOR POSSIBLE SOVIET MARS SHOTS, 1962

Personal Author(s):

ROWELL, L N

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0332190

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE EFFECTIVENESS OF COMMAND CONTROL IN STRATEGIC OPERATIONS FOR THE MID-SIXTIES

Personal Author(s):

ELDRIDGE, F R

Report Date:

Oct 1962

Media Count:

429 Page(s)

Report Number(s):

RM-3152-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization...Department of the Air Force, Attn: Public Affairs Office, Washington, DC, 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341976

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESTIMATED SATELLITE-LAUNCHING CAPABILITY OF A MODIFIED RS-70

Personal Author(s):

RIIRKWOOD,T F

Report Date:

Oct 1962

Media Count:

31 Page(s)

Report Number(s):

RM-3182PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0332116

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SAFE: A STRATEGY-AND-FORCE-EVALUATION GAME

Personal Author(s):

HELMER,OLAF

BROWN,T A

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0342135

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BOMBER RANGE PERFORMANCE AT MACH 2.3 AND 3.0

Personal Author(s):

Weber,C M

Report Date:

Oct 1962

Media Count:

24 Page(s)

Report Number(s):

RM-3153-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only government agencies may request from DDC. Others request approval of RAND Corp., Santa Monica, Calif.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0332191

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GROUND EFFECT MACHINES AS MOBILE MISSILE BASES, WITH MAJOR EMPHASIS ON POTENTIAL OPERATING AREAS

Personal Author(s):

DUDLEY,V S

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0332242

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTEGRATED NOSE-CONE/DECOY PENETRATION SYSTEMS

Personal Author(s):

GAZLEY,CARL JR

RAYMOND,J L

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0287503

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RAND'S LOGISTICS RESEARCH PROGRAM

Personal Author(s):

ZWICK,CHARLES J

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0287504

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FLOW NETWORKS AND COMBINATORIAL OPERATIONS RESEARCH

Personal Author(s):

FULKERSON,D R

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0291611

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BREMSSTRAHLUNG DURING THE COLLISION OF LOW-ENERGY ELECTRONS WITH NEUTRAL ATOMS
AND MOLECULES

Personal Author(s):

HUNDLEY,R O

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0380559

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ARE OUR WEAPON SYSTEMS SECURE,

Personal Author(s):

Latter, Richard

Report Date:

Oct 1962

Media Count:

4 Page(s)

Report Number(s):

RM-3363-PR

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: USGO: others to Hq., USAF, Deputy Chief of Staff, Research and Development, Directorate of Operational Requirements and Development Plans, Washington, D. C. 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0290492

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COST OF INTERNATIONAL ECONOMIC AID IN 1961

Personal Author(s):

PINCUS,JOHN A

Report Date:

Oct 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0418508

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PROBLEM OF LOGISTICS COOPERATION IN NATO, 1962,

Personal Author(s):

Mendershausen,Horst

Report Date:

Oct 1962

Media Count:

19 Page(s)

Report Number(s):

RM-3349-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0287502

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONCEPTS OF THE STAFF ELEMENT IN AIR FORCE COMMAND CONTROL

Personal Author(s):

Heuston,M C

Report Date:

Oct 1962

Media Count:

21 Page(s)

Report Number(s):

RM-3345-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0380563

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PROPOSAL ON THE PROJECTION OF AMERICAN ATTITUDES TOWARDS FRENCH NUCLEAR POLICIES,

Personal Author(s):

Brodie,B

Leites,N

Report Date:

Oct 1962

Media Count:

16 Page(s)

Report Number(s):

RM-3343-ISA

Contract Number:

SD-79

ARPA Order-189-61

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: USGO: others to Office of the Assistant Secretary of Defense, Attn: ISA. Washington, D. C. 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB199608

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/b199608.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SAFE: A Strategy-And-Force-Evaluation Game.

Descriptive Note:

Final rept.,

Personal Author(s):

Helmer, O

Brown, T

Report Date:

01 Oct 1962

Media Count:

91 Page(s)

Report Number(s):

RAND-RM-3287-PR

OSD/NA-84-0010

XD-84-0010

Monitor Series:

84-0010

OSD/NA

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to DoD only; Direct Military Support; 4 Nov 91. Other requests shall be referred to OSD/NA, The Pentagon, Room 3A930, Washington, DC 20301-2950.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0285653

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REPORT OF PHYSIOGRAPHIC CONDITIONS OF EASTERN VICTORIA ISLAND AND ADJACEN AREAS,
NORTHWEST TERRITORIES, CANADA

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0401470

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/401470.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) VIEWER, STILL PICTURE AR-34 (XE-1)

Personal Author(s):

Matthews, W D

Ivins, F R

Report Date:

Sep 1962

Media Count:

47 Page(s)

Report Number(s):

USAERDL-TR-2302

XA-USAEL

Monitor Series:

USAEL

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; SEP 1962. Other requests shall be referred to Army Electronics Research Laboratory, Fort Monmouth, NJ.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0285652

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REPORT OF PHYSIOGRAPHIC CONDITIONS OF CENTRAL BAFFIN ISLAND AND ADJACENT AREAS,
NORTHWEST TERRITORIES, CANADA

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0285972

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) QUALITATIVE SUPPORT REQUIREMENTS (QSR); A CONCEPT FOR IMPROVED LOGISTICS PLANNING
DURING WEAPON-SYSTEM DEVELOPMENT

Personal Author(s):

RODRIQUEZ,R A

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0285974

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FALLOUT HAZARD AS A FUNCTION OF SHIELDING; A CASE STUDY

Personal Author(s):

BATTEN,E S

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0285651

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE TURBULENT BOUNDARY LAYER IN A COMPRESSIBLE FLUID

Personal Author(s):

COLES, D E

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0285642

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REPORT OF THE PHYSICAL ENVIRONMENT OF NORTHERN BAFFIN ISLAND AND THE ADJACEDNT,
NORTHWEST TERRITORIES, CANADA

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0285069

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ATMOSPHERIC TURBULENCE AND THE SCINTILLATION OF STARLIGHT

Personal Author(s):

REIGER,S H

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0284755

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REVIEW OF OSD REPORTING REQUIREMENTS

Personal Author(s):

TRUPPNER,W C

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0285408

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEW GRAPH PAPER FOR CIRCULAR NORMAL DISTRIBUTIONS

Personal Author(s):

BURKE,T FINLEY

Report Date:
Sep 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0341978
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ADVANCED LOW-YIELD NUCLEAR WEAPONS FOR CONTROLLED RENOVATION OPERATIONS
Personal Author(s):
Cohen, Samuel T
Report Date:
Sep 1962
Media Count:
24 Page(s)
Report Number(s):
Memo. RM3276PR
Contract Number:
AF49 638 700
Report Classification:
SECRET
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED
51 - RESTRICTED DATA
Distribution Statement:
Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0284067

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF PROGRAMMING LANGUAGES IN COMMAND AND CONTROL

Personal Author(s):

HAVERTY,J P

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0288909

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TACTICS IN A LOCAL CRISIS

Personal Author(s):

FERGUSON,ALLEN R

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0331659

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTERVENTION IN ARAB-ISRAELI CONFLICTS

Personal Author(s):

HASTINGS,W H

QUADE,E S

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0331898

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BRIEF SURVEY OF STRATEGIC WEAPON SYSTEMS AND CONCEPTS

Personal Author(s):

JACKSON,V G

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339471

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYMPATHETIC DETONATION AND BALLISTIC MISSILE DEFENSE

Personal Author(s):

Hoffman,P R

Karzas,W J

Latter,A L

Report Date:

Sep 1962

Media Count:

31 Page(s)

Report Number(s):

RM3290PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0342136

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

Boehm,Barry

Report Date:

Sep 1962

Media Count:

69 Page(s)

Report Number(s):

RM2862PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

RESTRICTED DATA. Not releasable to foreignnationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0288248

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE STRUCTURE OF FIELD SPACE

Personal Author(s):

EDELEN,DOMINIC G B

Report Date:

Sep 1962

Media Count:

239 Page(s)

Report Number(s):

R-392-PR

Contract Number:

AF 49(638)700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0286757

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CIVIL AND MILITARY AIRFIELDS IN THE U.S. ZI: PHYSICAL, CLIMATIC AND FACILITY DATA

Personal Author(s):

DUDLEY,V S

WILSON,J A

Report Date:

Sep 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338514

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME CONSIDERATIONS OF A NON-ORBITING APPROACH TO SATELLITE INTERCEPTION

Descriptive Note:

Memorandum rept.

Personal Author(s):

Nyland, F S

Report Date:

Sep 1962

Media Count:

97 Page(s)

Report Number(s):

RAND/RM-3151-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

SECRET

Distribution Limitation(s):

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23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; SEP 1962. Other requests shall be referred to Deputy Chief of Staff, Research and Technology (Air Force), Directorate of Development Planning, Attn: RAND Project Office, Washington, DC 20330. Document partially illegible. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB044663

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Contract Negotiations and Results in Aircraft Procurement: Case Studies of the B-52 and B-58.

Descriptive Note:

Memorandum rept.,

Personal Author(s):

Preston, L E

Report Date:

Sep 1962

Media Count:

117 Page(s)

Report Number(s):

RAND/RM-3254-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution limited to U.S. Gov't. agencies only; Test and Evaluation; 3 Mar 80. Other requests for this document must be referred to Deputy Chief of Staff, Research, Development and Acquisition (Air Force), Attn: AF/RDQM. Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224170

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXCERPTS FROM A STATEMENT BY F. R. COLLBOHM PRESIDENT OF THE RAND CORPORATION BEFORE THE MILITARY OPERATIONS SUBCOMMITTEE HOUSE COMMITTEE ON GOVERNMENT OPERATIONS.

Report Date:

06 Aug 1962

Media Count:

27 Page(s)

Report Number(s):

P-2800

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0331394

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GEOTECHNICAL ASPECTS OF MILITARY SITING IN ALASKA AND SIMILAR ENVIRONMENTS

Personal Author(s):

JUDD,W R

Report Date:

Aug 1962

Media Count:

93 Page(s)

Report Number(s):

RM-2783-PR

Contract Number:

AF49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0282874

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RESEARCH ASPECTS OF COMMAND AND CONTROL

Personal Author(s):

GATTO,O T

MCGUIRE,C B

VAN,R L

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0380565

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ACCRA ASSEMBLY - 'WORLD WITHOUT THE BOMB' - 1962: A PERSONAL REPORT,

Personal Author(s):

Katz,Amrom H

Report Date:

Aug 1962

Media Count:

171 Page(s)

Report Number(s):

RM-3302-ISA

Contract Number:

SD-79

ARPA Order-189-61

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: USGO: others to Office of the Assistant Secretary of Defense, Attn: ISA. Washington, D. C. 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0283391

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SHARING THE COSTS OF MILITARY ALLIANCE AND INTERNATIONAL ECONOMIC AID

Personal Author(s):

PINCUS,JOHN A

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0332181

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/332181.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INSTALLATION HARDENING CONCEPTS FOR MANNED BOMBER SYSTEMS

Descriptive Note:

Memorandum rept.

Personal Author(s):

LAUPA, ARMAS

HAMMER, J G

SANDOVAL, C A

Report Date:

Aug 1962

Media Count:

41 Page(s)

Report Number(s):

RAND/RM-3239-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Aug 1962. Other requests shall be referred to USAF, Deputy Chief of Staff, Research & Development, Directorate of Operational Requirements and Development Plans, Attn: Project Rand Group (AFRDQA), Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0331479

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) IMPLICATIONS OF A COMMUNIST CHINESE NUCLEAR CAPABILITY: A BRIEFING

Personal Author(s):

BLACHLY, R L

GOURE, L

Report Date:

Aug 1962

Media Count:

21 Page(s)

Report Number(s):

RM-3264-PR

Contract Number:

AF49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0331167

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Research Utility of the Soviet Journal, Military Thought, for the Period 1945-1953: A Preliminary Report.

Personal Author(s):

KOLKOWICZ,ROMAN

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0331115

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN INVESTIGATION OF POSSIBLE SITES FOR A SUPERHARD COMMAND CONTROL CENTER NEAR
BARKSDALE AIR FORCE BASE

Personal Author(s):

GENENSKY,SAMUEL M

LOOFBOUROW,R L

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0411298

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Strengthening NATO's Scandinavian Flank.

Personal Author(s):

Robbins,James J

Report Date:

Aug 1962

Media Count:

33 Page(s)

Report Number(s):

RM-3282-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0282261

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MODEL OF THE GEOGRAPHIC DISTRIBUTION OF CANADA'S POPULATION,

Personal Author(s):

Hanunian,Norman A

Report Date:

Aug 1962

Media Count:

45 Page(s)

Report Number(s):

RM-3259-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: No Foreign.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0331246

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) NATO'S ROLE IN A BERLIN CRISIS: AUTOMATIC OR SELECTIVE
Personal Author(s):
VANDEVANTER,E JR
Report Date:
Aug 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0339081
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A NOTE ON DECOY-WARHEAD TRADEOFFS FOR ICBMs
Personal Author(s):
Graham,W B
Report Date:
Aug 1962
Media Count:
39 Page(s)
Report Number(s):
RM-3248-PR
Contract Number:
AF49 638 700
Report Classification:
SECRET
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
51 - RESTRICTED DATA
Distribution Statement:
Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339080

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BRIEF STUDY OF THE UTILITY OF ALL-DECOY PAY LOADS FOR ICBM'S

Personal Author(s):

Schamberg,R

Report Date:

Aug 1962

Media Count:

23 Page(s)

Report Number(s):

RM-3225-PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0289799

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) KHRUSHCHEV'S LIMITED DICTATORSHIP

Personal Author(s):

RUSH,MYRON

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0283393

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ARMY COST MODEL

Personal Author(s):

BAKER,C N

MCCULLOUGH,J D

Report Date:

Aug 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339528

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE RAND AD HOC GROUP ON DEFENSE

Descriptive Note:

Research memo

Personal Author(s):

Latter, A

Digby, J

Graham, W

Latter, R

Marshall, A

Report Date:

Aug 1962

Media Count:

22 Page(s)

Report Number(s):

RAND/RM-3237-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; AUG 1962. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Directorate of Operational Requirements and Development Plans, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341382

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON IMPROVING MIDTERM ESTIMATES OF SOVIET MILITARY CAPABILITIES FOR USE IN UNITED STATES MILITARY PLANNING

Personal Author(s):

Loftus, Joseph E

Marshall, Andrew W

Report Date:

Aug 1962

Media Count:

23 Page(s)

Report Number(s):

Memo. RM2892PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only government agencies may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337770

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) HIGH-ALTITUDE NUCLEAR BURSTS AND THE OUTER VAN ALLEN BELT

Personal Author(s):

Crain, C M

Tamarkin, P

Report Date:

Jul 1962

Media Count:

7 Page(s)

Report Number(s):

Memo. RM3272PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0414811

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MISSILE-FIRING MODELS WHICH MAKE USE OF RECONNAISSANCE INFORMATION,

Personal Author(s):

Matthes,T K

Report Date:

Jul 1962

Media Count:

14 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337769

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THOUGHTS ON THE ACTIVE DEFENSE OF FIXED MISSILE BASES UNDER ICBM ATTAC+

Personal Author(s):

Linville, W K

ONeill, L H

Report Date:

Jul 1962

Media Count:

86 Page(s)

Report Number(s):

RM3179PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0331306

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIMITED WAR PATTERNS: I, SOUTHEAST ASIA (1963)

Personal Author(s):

HASTINGS, W H

Report Date:

Jul 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0331124

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MANPOWER LIMITATIONS AND THE CONTROL OF CONVENTIONAL WAR

Personal Author(s):

LEVINE,R A

Report Date:

Jul 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: No form, Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0330122

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TWO SOVIET SCHOLARS VISIT RAND: I. S. GLAGOLEV AND J. M. LEMIN

Personal Author(s):

DINERSTEIN,H S

Report Date:

Jul 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341975

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

Cohen, S T

Report Date:

Jul 1962

Media Count:

33 Page(s)

Contract Number:

AF49

638 700

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only government agencies may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341383

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MILITARYOF TACTICAL WARNING OF AN ATTACK ON CONUS

Personal Author(s):

Carpenter,M B

Report Date:

Jul 1962

Media Count:

99 Page(s)

Report Number(s):

Memo. RM 3195PR

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB223078

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/b223078.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Technological Aspects of Contemporary and Future Civil Aircraft for the World's Less-Developed Areas.

Descriptive Note:

Memorandum rept.,

Personal Author(s):

Cartaino, T F

Report Date:

Jul 1962

Media Count:

80 Page(s)

Report Number(s):

RAND/RM-3060-RC

X0-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB253940

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Semiannual Progress Report Number Six, 1 January - 30 June 1962 (Rand Corporation)

Report Date:

Jul 1962

Media Count:

30 Page(s)

Report Number(s):

AR-25-ARPA

XT-DARPA

Contract Number:

ARPA ORDER-189-61

Monitor Series:

DARPA

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Unclassified

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05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution: Further dissemination only as directed by Defense Advanced Research Projects Agcy., 3701 N. Fairfax Dr., Arlington, VA 22203, Jul 62 or higher DoD authority.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329624

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EXPLICIT GUIDANCE TECHNIQUE

Personal Author(s):

GORDON,GEORGE

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329782

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRAJECTORIES FOR POSSIBLE SOVIET VENUS SHOTS, 1962

Personal Author(s):

ROWELL,L N

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329963

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FORECASTING THE MAINTENANCE MANPOWER NEEDS OF THE DEPOT SYSTEM

Personal Author(s):

JOHNSON,R E

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338539

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ESCALATION OF LIMITED WAR IN LAOS

Descriptive Note:

Memorandum rept.

Personal Author(s):

Reinhardt, G C

Report Date:

Jun 1962

Media Count:

89 Page(s)

Report Number(s):

RAND/RM-2854-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUN 1962. Other requests shall be referred to Deputy Chief of Staff, Research and Technology (Air Force), Directorate of Development Planning, Attn: RAND Project Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0413271

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SELECTION AND USE OF STRATEGIC AIR BASES,

Personal Author(s):

Wohlstetter,A J

Hoffman,F S

Lutz,R J

Report Date:

Jun 1962

Media Count:

383 Page(s)

Report Number(s):

R266

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0330086

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUPPORT CAPABILITIES FOR LIMITED WAR FORCES IN LAOS AND SOUTH VIETNAM

Personal Author(s):

ANDERSON,MARY E

RAINEY,RICHARD B JR

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339286

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELIMINATION OF THE ICBM TANKAGE AS A RADAR TARGET

Personal Author(s):

Davis,M H

Report Date:

Jun 1962

Media Count:

29 Page(s)

Report Number(s):

RM2605 PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340552

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COUNTER-INSURGENCY AND AIR POWER: REPORT OF A RAND AD HOC GROUP

Personal Author(s):

Speier,H

Buchheim,R W

George,A L

Kershaw,J A

Oyster,D E

Report Date:

Jun 1962

Media Count:

189 Page(s)

Report Number(s):

RM-3203PR

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339532

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/339532.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE MILITARY IMPLICATIONS OF A SMALL DENUCLEARIZED ZONE FOR CENTRAL EUROPE

Descriptive Note:

Memorandum

Personal Author(s):

Vandevanter, Jr , E

Report Date:

Jun 1962

Media Count:

88 Page(s)

Report Number(s):

RAND-RM-3236

XD-DARPA

Contract Number:

ARPA-SD-79

ARPA ORDER 189-61

Monitor Series:

DARPA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUN 1962. Other requests shall be referred to Defense Advanced Research Projects Agency, Arlington, VA.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0276672

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE HEATH SPECIAL REPAIR FACILITY FOR INERTIAL GUIDANCE SYSTEMS: SOME PROBLEMS AND SUGGESTIONS

Personal Author(s):

VOOSEN,B J

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0276673

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DERIVATION AND USE OF ESTIMATING RELATIONSHIPS

Personal Author(s):

PETRUSCHELL,R L

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0281256

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/281256.pdf

Size: 340 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A NOTE ON DYNAMIC PROGRAMMING AND PERTURBATION THEORY

Descriptive Note:

Memorandum

Personal Author(s):

Bellman, Richard

Report Date:

Jun 1962

Media Count:

13 Page(s)

Report Number(s):

RAND-RM-3169-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

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23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUN 1962. Other requests shall be referred to Air Force Research and Development Command, Attn: Project Rand, Pentagon, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337755

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET BOMBARDMENT SATELLITE POSSIBILITIES

Personal Author(s):

Scesa,Steve

Report Date:

Jun 1962

Media Count:

18 Page(s)

Report Number(s):

RM3193PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0282338

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND DIFFUSE REFLECTION OF RADIATION FROM A COLLIMATED POINT
SOURCE III

Personal Author(s):

BELLMAN,RICHARD

KALABA,ROBERT

UENO,SUEO

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0278132

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES AND PRODUCTION OF MACHINERY IN THE SOVIET UNION, 1928-1958

Personal Author(s):

MOORSTEEN,RICHARD

Report Date:

Jun 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0360923

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/360923.pdf

Size: 223 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A STUDY OF FUTURE LOW-ALTITUDE INTERCONTINENTAL-BOMBER DESIGNS - EFFECT OF GROSS WEIGHT ON RANGE OF CHEMICALLY FUELED BOMBERS

Descriptive Note:

Research memo.

Personal Author(s):

Cartaino, T F

Report Date:

Jun 1962

Media Count:

12 Page(s)

Report Number(s):

RAND-RM-2797-PR-SUPPL

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUN 1962. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329428

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME THOUGHTS ON COMMUNIST CHINA'S EXPLOITATION OF A NUCLEAR DETONATION

Personal Author(s):

HSIEH,ALICE LANGLEY

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329734

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ADAPTIVE SCHEDULING OF MAINTENANCE FOR THE MINUTEMAN MISSILE

Personal Author(s):

MCCALL, J J

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0286720

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/286720.pdf

Size: 604 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INVARIANT IMBEDDING AND NONCOHERENT SCATTERING IN A FINITE, INHOMOGENEOUS
ATMOSPHERE

Descriptive Note:

Memorandum rept.

Personal Author(s):

BELLMAN, RICHARD

KALABA, ROBERT

UENO, SUEO

Report Date:

May 1962

Media Count:

25 Page(s)

Report Number(s):

RAND-RM-2902-ARPA

XD-ARPA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; May 1962. Other requests shall be referred to Defense Advanced Research Projects Agency, Arlington, VA 22022. (_____).

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0422142

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME MOMENTS FOR CIRCLE COVERINGS,

Personal Author(s):

Doyle,W L

Reed,I S

Report Date:

May 1962

Media Count:

8 Page(s)

Report Number(s):

P2581

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329368

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SHORT STUDY OF A SMALL LOW-ALTITUDE BOMBER AS A PARASITE AIRPLANE

Personal Author(s):

JOHNSTON,R B

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0276151

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GENERALIZED DEPOT MAINTENANCE COST ESTIMATING RELATIONSHIPS FOR BOMBER AND FIGHTER AIRCRAFT

Personal Author(s):

FISHER,G H

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0275527

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A TECHNIQUE FOR RESOLVING DEGENERACY IN LINEAR PROGRAMMING: NOTES ON LINEAR PROGRAMMING AND RECENT EXTENSIONS-PART 61

Personal Author(s):

WOLFE,PHILIP

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339215

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE VULNERABILITY OF RE-ENTRY VEHICLES TO ABM SYSTEMS: A SURVEY OF THE PROBLEM

Descriptive Note:

Research memo.

Personal Author(s):

Brodie, B

Marshall, A W

Martinelli, E A

Schamberg, R

Taylor, V D

Report Date:

May 1962

Media Count:

90 Page(s)

Report Number(s):

RAND/RM-3123-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 1962. Other requests shall be referred to Deputy Chief of Staff Research and Development (USAF), Directorate of Operational Requirements and Development Plans, Attn: Project Rand Group, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0276153

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF THEORY AND EXPERIMENT AT THE BORDERS OF TRANSITION FLOW OF A
RAREFIED GAS

Personal Author(s):

SCHAAF,S A

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329546

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECTS OF LAUNCH SPEED AND RANGE ON THE ORBITAL PAYLOADS OF ROCKET-LAUNCHING
AIRPLANES USING IN-FLIGHT PROPELLANT ADDITION

Personal Author(s):

KIRKWOOD,T F

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0281435

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FORMAL SOLUTIONS OF ANALYTIC DIFFERENTIAL EQUATIONS

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280862

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VECTOR LYAPUNOV FUNCTIONS

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280909

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A NEW APPROACH TO THE COMPUTATIONAL SOLUTION OF PARTIAL DIFFERENTIAL EQUATIONS

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0278478

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPLIED DYNAMIC PROGRAMMING

Personal Author(s):

BELLMAN,RICHARD E

DREYFUS,STUART E

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0421626

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPOSITE MATERIALS. CONSIDERATIONS FOR FUTURE RESEARCH,

Personal Author(s):

Micks, William R

Report Date:

May 1962

Media Count:

33 Page(s)

Report Number(s):

P2578

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0282046

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE DIFFUSE REFLECTION OF PARALLEL RAYS BY AN INHOMOGENEOUS FLAT LAYER AS A
LIMITING PROCESS,

Personal Author(s):

Bellman ,Richard

Kalaba ,Robert

Ueno,Sueo

Report Date:

May 1962

Media Count:

13 Page(s)

Report Number(s):

RM-2913

Contract Number:

SD-79

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341983

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET MILITARYD++D, 1945-1961

Personal Author(s):

Trilling,Leon

Report Date:

May 1962

Media Count:

57 Page(s)

Report Number(s):

Memo. RM3019PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0278474

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND TIME-DEPENDENT DIFFUSE REFLECTION OF A PENCIL OF RADIATION BY
A FINITE INHOMOGENEOUS FLAT LAYER-I

Personal Author(s):

BELLMAN,RICHARD

KALABA,ROBERT

UENO,SUEO

Report Date:

May 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB217512

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/b217512.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A New Rational Approach to Weather-Control Research.

Descriptive Note:

Final rept.,

Personal Author(s):

Greenfield, S M

Huschke, R E

Mintz, Yale

Rapp, R R

Sartor, J D

Report Date:

May 1962

Media Count:

91 Page(s)

Report Number(s):

RAND/RM-3205-NSF

XJ-XD

Contract Number:

NSF-C-252

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339216

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONJUGATE REGION RADIO WAVE ABSORPTION PRODUCED BY HIGH-YIELD LOW-ALTITUDE
NUCLEAR BURSTS

Personal Author(s):

Crain,C M

Report Date:

Apr 1962
Media Count:
26 Page(s)
Report Number(s):
RM3111PR
Contract Number:
AF49 638 700
Report Classification:
SECRET
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
51 - RESTRICTED DATA
Distribution Statement:
Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0328915
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) PSYCHOLOGICAL ASPECTS OF TACTICAL AIR OPERATIONS (KOREA)
Personal Author(s):
GEORGE, A L
Report Date:
Apr 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329039

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EFFECTS OF HIGH BACKGROUNDS ON THE PERFORMANCE OF INFRARED SYSTEMS

Personal Author(s):

GELINAS, R W

Report Date:

Apr 1962

Media Count:

17 Page(s)

Report Number(s):

RM-2983-PR

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337756

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PEAR SHOT

Personal Author(s):

Latter,R

LeLevier,R E

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Number(s):

RM3081PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337758

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CLOSE-IN ELECTRIC FIELD GENERATED BY A SPHERICALLY SYMMETRIC NUCLEAR BURST

Personal Author(s):

Bjorklund,R F

Report Date:

Apr 1962

Media Count:

44 Page(s)

Report Number(s):

RM2955PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0369058

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESTIMATES OF PHENOMENOLOGY FOR A HIGH ALTITUDE NUCLEAR BURST,

Personal Author(s):

Gilmore,F R

Report Date:

Apr 1962

Media Count:

31 Page(s)

Report Number(s):

RM-2959-PR

Contract Number:

AF49(638)-700

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

51 - RESTRICTED DATA

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0411570

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/411570.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MISSILE AIRFRAME COST ESTIMATING TECHNIQUES, PROBLEMS AND POSSIBLE SOLUTIONS

Descriptive Note:

Research memo.

Personal Author(s):

Campbell, H G

Report Date:

Apr 1962

Media Count:

32 Page(s)

Report Number(s):

RM-3068-PR-SUPPL

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; APR 1962. Other requests shall be referred to Deputy Chief of Staff for Research and Technology, Directorate of Development and Planning, WASHINGTON, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0373594

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ORIGINS AND OPERATIONS OF THE INTERNATIONAL CONTROL COMMISSION IN LAOS AND VIETNAM,

Report Date:

Apr 1962

Media Count:

243 Page(s)

Report Number(s):

RM-2967-ARPA

Contract Number:

SD-79

ARPA Order-189-61

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: USGO: others to Director, Advanced Research Projects Agency, Washington, D. C. 20301.

Attn: Administrative Office.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337754

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

Latter, R

LeLevier, R E

Report Date:

Apr 1962

Media Count:

14 Page(s)

Report Number(s):

RM3082PR

Contract Number:

AF49

638 700

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329224

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

BOEHM,BARRY W

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329279

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DESCRIPTION AND OPERATION OF A SHELTER PIT FOR EQUIPMENT

Personal Author(s):

SERBIN,HYMAN

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329265

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COST ESTIMATES AS PREDICTORS OF ACTUAL WEAPON COSTS: A STUDY OF MAJOR HARDWARE ARTICLES,

Personal Author(s):

Summers,Robert

Report Date:

Apr 1962

Media Count:

76 Page(s)

Report Number(s):

RM-3061-PR

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337766

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WEAPON SYSTEM IMPLICATIONS OF SPUTNIK VIII.

Personal Author(s):

Scesa,Steve

Report Date:

Apr 1962

Media Count:

14 Page(s)

Report Number(s):

RM3017PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329088

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXHAUST-GAS COMPOSITION AND AFTERBURNING ENERGY RELEASE FOR SELECTED ROCKET PROPELLANTS

Personal Author(s):

KRASE,W H

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329207

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE AREA-COVERAGE CAPABILITIES OF BACTERIOLOGICAL AND CHEMICAL WEAPONS

Descriptive Note:

Research memo.

Personal Author(s):

TAMPLIN, A R

Report Date:

Apr 1962

Media Count:

51 Page(s)

Report Number(s):

RAND/RM-2945-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff Research & Development (AF), Directorate of Operational Requirements & Development Plans, Attn: Project Rand Group, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0411574
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) MISSILE AIRFRAME COST ESTIMATING TECHNIQUES,
Personal Author(s):
Campbell,H G
Report Date:
Apr 1962
Media Count:
35 Page(s)
Report Number(s):
RM 3068 PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
03 - U.S. GOVT. ONLY; DOD CONTROLLED
Distribution Statement:
Notice: Only government agencies may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0329202
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) INFRARED TECHNIQUES APPLIED TO THE DETECTION AND INTERCEPTION OF BALLISTIC MISSILES. A
PRESENTATION TO A NATO SYMPOSIUM
Personal Author(s):
PASSMAN,SIDNEY
Report Date:
Apr 1962
Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: No Forn. Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329203

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UNCONVENTIONAL WARFARE: A BRIEF REVIEW (U)

Personal Author(s):

STROTHER,K C

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0292751

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TOTAL FORCE STRUCTURE COST ANALYSIS (A LECTURE FOR THE AFSC COST ANALYSIS COURSE)

Personal Author(s):

FISHER,G H

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0281772

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING THEORY OF NEUTRON TRANSPORT. CORRELATION FUNCTIONS.

Personal Author(s):

Bellman ,Richard

Kalaba ,Robert

Vosudevon,Romabhadra

Report Date:

Apr 1962

Media Count:

11 Page(s)

Report Number(s):

RM-3114-ARPA

Contract Number:

SD-79

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280428

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXTENDED FUNCTIONAL VARIATION

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280621

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETERMINING PREFERRED MANAGEMENT TECHNIQUES IN NEW SYSTEMS THROUGH GAME-SIMULATION

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280756

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE STRUCTURE OF STATIONARY RANDOM FUNCTIONS

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0296927

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MIDDLE EAST OIL CRISES AND WESTERN EUROPE'S ENERGY SUPPLIES

Personal Author(s):

LUBELL, HAROLD

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280665

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/280665.pdf

Size: 402 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INTERPOLATION AND EXTRAPOLATION OF STATIONARY RANDOM SEQUENCES

Personal Author(s):

Kolmogorov, A N

Report Date:

Apr 1962

Media Count:

20 Page(s)

Report Number(s):

RM-3090-PR

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280618

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/280618.pdf

Size: 384 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME NUMERICAL RESULTS USING QUASILINEARIZATION FOR NONLINEAR TWO-POINT BOUNDARY
VALUE PROBLEMS

Personal Author(s):

Bellman, Richard

Kalaba, Robert

Kptkin, Bella

Report Date:

Apr 1962

Media Count:

22 Page(s)

Report Number(s):

RM-3113-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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APR 1962. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of
Staff, Research and Technology, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280405

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET INTEREST IN THE MILITARY USE OF OUTER SPACE. SOME NEW EVIDENCE

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280301

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/280301.pdf

Size: 304 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE CHARACTERIZATION OF CONTEMPORANEOUS AND BORN RIGID MOTIONS AND THE QUESTION OF THEIR EQUIVALENCE

Personal Author(s):

Edelen, D G

Thomas, T Y

Report Date:

Apr 1962

Media Count:

13 Page(s)

Report Number(s):

RM-3039-PR

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1962. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Washington DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280298

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON ASYMPTOTIC BEHAVIOR OF SOLUTIONS OF SECOND-ORDER DIFFERENTIAL EQUATIONS

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280179

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SELECTED LIST OF UNCLASSIFIED PUBLICATIONS OF THE SOCIAL SCIENCE DEPARTMENT THE RAND CORPORATION 1948-1962

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280259

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPERATIONAL AND HUMAN FACTORS IN PLANNING AUTOMATED MAN-MACHINE CHECKOUT SYSTEMS

Report Date:

Apr 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340639

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME SUMMARY VIEWS ON SOVIET-AMERICAN COOPERATION ON SPACE ACTIVITIES

Personal Author(s):

Goldsen, Joseph M

Report Date:

12 Mar 1962

Media Count:

10 Page(s)

Report Number(s):

RM-3106PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only government agencies may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0404195

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/404195.pdf

Size: 408 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A COMPUTATIONAL TECHNIQUE FOR OPTIMAL CONTROL PROBLEMS WITH STATE VARIABLE
CONSTRAINT

Personal Author(s):

Ho, Y C

Report Date:

Mar 1962

Media Count:

23 Page(s)

Report Number(s):

RM-3042-NASA

XG-NASA

Monitor Series:

NASA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAR 1962. Other requests shall be referred to National Aeronautics and Space Administration, Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0279484

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME REMARKS ON SCIENTIFIC ACHIEVEMENT IN COMMUNIST CHINA

Report Date:

Mar 1962

Media Count:

23 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0279884

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAXIMUM TRANSFORM AND SEMIGROUPS OF TRANSFORMATIONS

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0329427

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BOOST-PHASE OBSERVATION ACCURACY REQUIREMENTS FOR AN AIR-BASED SLBM INTERCEPT SYSTEM

Personal Author(s):

BLUMENTHAL,I S

PEDERSEN,C R

CUNNINGHAM,R W

Report Date:

Mar 1962

Media Count:

108 Page(s)

Report Number(s):

RM-3076-ARPA

Contract Number:

SD-79

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0279578

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL EQUATIONS IN THE THEORY OF DYNAMIC PROGRAMMING--XII, AN APPLICATIONS OF
MAXIMUM TRANSFORM

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0279348

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE NONCONVERGENCE OF FICTITIOUS PLAY

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341100

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON CRITERIA OF VULNERABILITY OF PHYSICAL SYSTEMS TO NEMR: THE ELECTROMAGNETIC
RADIATION FROM NUCLEAR DETONATIONS

Personal Author(s):

Goldberg,P A

Report Date:

Mar 1962

Media Count:

41 Page(s)

Report Number(s):

Memo. RM3028PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0449102
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOURCES OF TURBULENCE IN THE NEW NATIONS,
Report Date:
Mar 1962
Media Count:
11 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0292069
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A COMPLETE SOLUTION OF THE X AND Y EQUATIONS OF CHANDRASEKHAR
Personal Author(s):
MULLIKIN, T W
Report Date:
Mar 1962
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0274133

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/274133.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A STATISTICAL INVESTIGATION OF MISSILE FAILURE DUE TO BENDING IN A TURBULENT
ATMOSPHERE

Descriptive Note:

Research memo.

Personal Author(s):

MATTHES, T K

Report Date:

Mar 1962

Media Count:

29 Page(s)

Report Number(s):

RM-2874-PR

XC-DCSRTAF-DDP

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

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MAR 1962. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of
Staff, Research and Technology, Department of the Air Force, Washington, DC 20330. Document
partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0273786

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/273786.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COVERAGE ESTIMATES OF FM, TV AND POWER FACILITIES USEFUL IN A BROADBAND DISTRIBUTED NETWORK

Descriptive Note:

Research memo.

Personal Author(s):

BARAN, PAUL

Report Date:

Mar 1962

Media Count:

39 Page(s)

Report Number(s):

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

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Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAR 1962. Other requests shall be referred to Deputy Chief of Staff, Research and Technology, Directorate of Development Planning, Department of the Air Force, Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0274600

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME EXTENSIONS OF THE RANDOM BOMB DROPS LOCAL FALLOUT MODEL OF RM-1969

Personal Author(s):

WEGNER,L H

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0343386

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/343386.pdf

Size: 974 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OPERATIONAL CONSIDERATIONS AND DESIGN TRADEOFFS FOR A MANNED MILITARY REENTRY VEHICLE

Personal Author(s):

Nyland, Frederic S

Report Date:

Mar 1962

Media Count:

45 Page(s)

Report Number(s):

RAND-RM-2949-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

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04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; MAR 1962. Other requests shall be referred to Air Force Research and Development Command, Project Rand, Pentagon, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0278472

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND DIFFUSE REFLECTION FROM A TWO-DIMENSIONAL FLAT LAYER

Personal Author(s):

BELLMAN,RICHARD

KALABA,ROBERT

UENO,SUEO

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0279343

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMAL AND NEARLY OPTIMAL POLICIES FOR A CLASS OF ADAPTIVE CONTROL PROCESSES

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0278582

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND THE TOWNSEND AVALANCHE

Personal Author(s):

BELLMAN,RICHARD

KALABA,ROBERT

VASUDEVAN,RAMABHADRA

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0328348

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/328348.pdf

Size: 676 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME THOUGHTS FOR FUTURE SPACE OPERATIONS

Descriptive Note:

Memo rept.

Personal Author(s):

CATLETT, L E

Report Date:

Mar 1962

Media Count:

20 Page(s)

Report Number(s):

2980-PR

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0328717

Full Text (pdf) Availability:

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File: /UL/328717.pdf

Size: 331 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE USE OF HIGH-ENERGY (BORON HYDRIDE) FUELS IN TURBOFANS

Personal Author(s):

KRASE, W H

Report Date:

Mar 1962

Media Count:

16 Page(s)

Report Number(s):

RM-3051-PR

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0328914

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANTI-PERSONNEL BW/CW AND STRATEGIC WAR

Personal Author(s):

TAMPLIN,A R

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0279237

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON SYSTEMS OF LINEAR INEQUALITIES IN HERMITIAN MATRIX VARIABLES

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0328567

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/328567.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROFIT: MAXIMIZING RANGE BY THE BEST CHOICE OF GEOGRAPHICAL LOCATIONS FOR AIR
REFUELINGS, PART 2. ILLUSTRATIVE APPLICATIONS AND DIGITAL COMPUTER SOLUTION

Descriptive Note:

Research memo.

Personal Author(s):

WECHSLER, J W

Report Date:

Mar 1962

Media Count:

57 Page(s)

Report Number(s):

RAND/RM-2876-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

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02 - U.S. GOVT. AND THEIR CONTRACTORS

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Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use;
MAR 1962. Other requests shall be referred to Hq. USAF, Deputy Chief of Staff Research and
Technology, Directorate of Development Planning, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0328909

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MILITARY GEOGRAPHY OF LAOS - A BARRIER TO COMMUNIST AGRESSION

Personal Author(s):

STROTHER,K C

KOON,R E

Report Date:

Mar 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0279157

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMAL CAPACITY SCHEDULING

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0328008

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRESENT STATUS OF EXPERIMENT AND THEORY OF SUSTAINER ROCKET EMISSION

Personal Author(s):

GELINAS,R W

KRASE,W H

TAMARKIN,P

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0278468

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A NEW COMPUTATIONAL SOLUTION OF TIME-DEPENDENT TRANSPORT PROCESSES - II. EXPLICIT INVERSION OF MATRIX

Personal Author(s):

BELLMAN,RICHARD

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0327875

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MANPOWER PLANNING FACTORS FOR AIR FORCE SPACE SYSTEMS IN THE CONCEPTUAL STAGES OF DEVELOPMENT

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0278469

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND TIME-DEPENDENT DIFFUSE REFLECTION BY A FINITE INHOMOGENEOUS FLAT LAYER-I

Personal Author(s):

BELLMAN,RICHARD

KALABA,ROBERT

UENO,SUEO

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340526

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DISCUSSION OF COMMUNICATIONS PLANNING FOR ARMS CONTROL

Personal Author(s):

Benson,Patrick

Report Date:

Feb 1962

Media Count:

85 Page(s)

Report Number(s):

RM-3029-ARPA

Contract Number:

SD-79

ARPA Order-189-61

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0277214

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ALTERNATIVE APPROACHES TO THE INTERNATIONAL ORGANIZATION OF DISARMAMENT

Personal Author(s):

IKLE,FRED C

ELLIOT,DAVID C

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0445353

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AGENA LAUNCH BASE ACTIVITIES AND SUGGESTED IMPROVEMENTS,

Personal Author(s):

Brom,J R

Mast,L T

Meyer,K H

Report Date:

Feb 1962

Media Count:

47 Page(s)

Report Number(s):

RM3006PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

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04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Release only to Department of Defense Agencies is authorized. Other certified requesters shall obtain release approval from U. S. Air Force, Wash. 25, D. C. Attn: AFRDPA.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339449

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME MILITARY USES OF CHAFF IN THE SPACE AGE

Personal Author(s):

Brennan, L E

Report Date:

Feb 1962

Media Count:

50 Page(s)

Report Number(s):

RM-3025-PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0278466

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PROBABILISTIC METHOD FOR PROBLEMS OF RADIATIVE TRANSFER, THE MARKOV PROPERTY OF RADIATIVE TRANSFER AND OF NEUTRON DIFFUSION

Personal Author(s):

UENO,SUEO

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0328237

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNICATION SATELLITES FOR ESSENTIAL COMMAND AND CONTROL PURPOSES IN THE MID-SIXTIES

Personal Author(s):

CARNE,J B

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0279154

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME PROBLEMS OF DISARMAMENT IN THE ASIAN AREA

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0328314

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN INVESTIGATION OF POSSIBLE SITES FOR UNDERGROUND CONSTRUCTION NEAR OFFUTT AIR
FORCE BASE

Personal Author(s):

GENENSKY,S M

LOOFBOUROW,R L

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0279143

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ALGORITHM FOR SCALING MATRICES, NOTES ON LINEAR PROGRAMMING AND EXTENSIONS.
PART 58

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0279155

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCABBING IN ROCK TUNNELS

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0273580

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/273580.pdf

Size: 8 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INVARIANT IMBEDDING AND RADIATIVE TRANSFER IN SLABS OF FINITE THICKNESS

Personal Author(s):

Bellman, R E

Kalaba, R E

Prestrud, M C

Report Date:

Feb 1962

Media Count:

348 Page(s)

Report Number(s):

RAND/R-388-ARPA

XD-ARPA

Contract Number:

SD-79

ARPA ORDER-189-61

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0279483

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE NUMERICAL SOLUTION OF A DIFFERENTIAL-DIFFERENCE EQUATION ARISING IN ANALYTIC NUMBER THEORY

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0272846

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECTS OF NUCLEAR BURSTS IN SPACE ON THE PROPAGATION OF HIGH-FREQUENCY RADIO WAVES BETWEEN SEPARATED EARTH TERMINALS

Personal Author(s):

CRAIN,C M

BOOKER,H G

Report Date:

Feb 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB193524

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/b193524.pdf

Size: 713 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A Set of Two-Body Orbital Parameters Useful for Nearly Circular Orbits and Some Related Equations

Descriptive Note:

Memorandum rept.

Personal Author(s):

Smith, F T

Report Date:

Feb 1962

Media Count:

39 Page(s)

Report Number(s):

RAND/RM-3037-NASA

XG-NASA

Contract Number:

NASR-21

Monitor Series:

NASA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; FEB 1962. Other requests shall be referred to National Aeronautics and Space Administration, Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADC960404

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Phoenix Modular Booster Concept: Cost Estimates and Estimating Procedures.

Descriptive Note:

Final rept.

Report Date:

Feb 1962

Media Count:

98 Page(s)

Report Number(s):

RAND-R-395-SSD

XC-SSD

Contract Number:

AF04(647)-642

Monitor Series:

SSD

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling office: Space Systems Div., Air Force Systems Command, Los Angeles AFS, CA.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0413608

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE POLITICAL USE OF SOVIET STRATEGIC POWER,

Personal Author(s):

Horelick,Arnold

Rush,Myron

Report Date:

Jan 1962

Media Count:

149 Page(s)

Report Number(s):

RM-2831-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only government agencies may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337750

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

Cohen, S T

Marcum, J I

Report Date:

Jan 1962

Media Count:

22 Page(s)

Report Number(s):

RM2908PR

Contract Number:

AF49

638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337748

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TACTICAL GAMING OF SPECIAL LOW-YIELD WEAPONS

Personal Author(s):

Reinhardt,G C

Report Date:

Jan 1962

Media Count:

57 Page(s)

Report Number(s):

RM2853PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337749

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF THE RADIOWAVE ABSORPTION PRODUCED BY THE YUCCA SHOT

Personal Author(s):

Crain,C M

Report Date:

Jan 1962

Media Count:

20 Page(s)

Report Number(s):

RM2965PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0418383

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTEGRATED SUPPLY-SUPPORT POLICIES: THE LP-III EXPERIENCE,

Personal Author(s):

Nelson,H W

Petersen,J W

Report Date:

Jan 1962

Media Count:

142 Page(s)

Report Number(s):

RM-2839-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337751

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

Jonas, Anne M

Report Date:

Jan 1962

Media Count:

44 Page(s)

Report Number(s):

RM2830PR

Contract Number:

AF49

638 700

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0327630

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ROCKET-GENERATED MECHANICAL WAVES IN THE IONOSPHERE

Personal Author(s):

BOOKER,H G

CRAIN,C M

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0618888

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPERATIONAL CRITERIA FOR THE DESIGN OF MISSILE READINESS TESTING PROGRAMS AND EQUIPMENT; APPENDIX C,

Personal Author(s):

Brom,Joseph R

Firstman,Sidney I

Report Date:

Jan 1962

Media Count:

965 Page(s)

Report Number(s):

RM-2735 app-C

Report Classification:

Unclassified

Distribution Limitation(s):

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23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

No Foreign.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0271701

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME CONSIDERATIONS AFFECTING INTEGRATION OF INFORMATION SYSTEMS

Personal Author(s):

PROSCHAN,ARNOLD

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339168

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COMPARISON OF BALLISTIC AND GLIDE DELIVERY OF INTERCONTINENTAL MISSILES WITH LOW-LEVEL ATTACK CAPABILITY

Personal Author(s):

Kirkwood, T F

Wikholm, D E

Report Date:

Jan 1962

Media Count:

42 Page(s)

Report Number(s):

Memo. RM2827PR

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0274683

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE POLARITY OF THE SCATTERING FUNCTION IN AN INHOMOGENEOUS FLAT LAYER

Personal Author(s):

UENO,SUEO

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0271702

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME ASPECTS OF PROGRAM BUDGETING IN OSD

Personal Author(s):

PROSCHAN,ARNOLD

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0270816

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN THE THEORY OF COMPUTATIONAL ALGORITHMS. I. FORMALIZATION, COMPUTABILITY, REPRESENTATION, AND ANALYSIS PROBLEMS

Personal Author(s):

LEVIEN,R E

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337752

Corporate Author:

RAND CORP SANTA MONICA CA

Descriptive Note:

Memorandum rept.

Personal Author(s):

Davis, R A

Scesa, S

Report Date:

Jan 1962

Media Count:

75 Page(s)

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RAND-RM-2726-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0332704

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NAVY REQUIREMENTS FOR COMMUNICATION SATELLITE SYSTEMS

Personal Author(s):

REINERTSEN,R W

Report Date:

Jan 1962

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0327774

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE USE OF AIRSHIPS FOR POST-ATTACK COMMAND AND CONTROL

Descriptive Note:

Memorandum rept.

Personal Author(s):

HILL, L S

Report Date:

Jan 1962

Media Count:

81 Page(s)

Report Number(s):

RM-2794-PR

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff Research & Technology (AF), Directorate of Development Planning, Attn: Project Rand Group, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

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AD0327659

Full Text (pdf) Availability:

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File: /UL/327659.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE EFFECT OF DOOR STRENGTH ON THE VULNERABILITY AND HARDNESS OF HANGAR- TYPE
PROTECTIVE ALERT SHELTERS

Descriptive Note:

Memo rept.

Personal Author(s):

HAMMER, J G

Report Date:

Jan 1962

Media Count:

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Report Number(s):

RM-2939-PR

XC-USAF

Contract Number:

AF 49(688)-700

Monitor Series:

USAF

Report Classification:

Unclassified

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Technical Reports Collection

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Full Text (pdf) Availability:

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File: /UL/294616.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DETECTION OF IONIZATION EFFECTS FROM NUCLEAR EXPLOSIONS IN SPACE

Descriptive Note:

Memo.

Personal Author(s):

LATTER, R

LE LEVIER, R E

Report Date:

Dec 1961

Media Count:

71 Page(s)

Report Number(s):

RM-2856-ARPA

XD-ARPA

Monitor Series:

ARPA

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339728

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ARGUMENTS IN SUPPORT OF THE PROPOSED ATMOSPHERIC NUCLEAR EFFECTS TESTS

Descriptive Note:

Memorandum rept.

Personal Author(s):

Latter, A L

McMillan, W G

Report Date:

Dec 1961

Media Count:

16 Page(s)

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RAND/RM-2962-PR

XC-DCSRTAF-DDP

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AF 49(638)-700

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Distribution authorized to DoD only; Administrative/Operational Use; DEC 1961. Other requests shall be referred to Deputy Chief of Staff Research and Technology (Air Force), Directorate of Development Planning, Attn: RAND Project Office, Washington, DC. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0278024

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARATIVE STUDY OF PREDICTION TECHNIQUES

Personal Author(s):

ASTRACHAN,MAX

BROWN,BERNICE B

HOUGHTEN,JAMES W

Report Date:

Dec 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0417046

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BERLIN OBSERVER'S NOTES ON MORALE BEFORE AND AFTER THE WALL,

Personal Author(s):

Hurwitz, Harold

Report Date:

Dec 1961

Media Count:

12 Page(s)

Report Number(s):

RM-2909-PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0327055

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE INTEGRATE-TRANSFER-LAUNCH SYSTEM FOR LARGE BOOSTERS

Personal Author(s):

Chester ,J M
Lamorte,J F
Report Date:
Dec 1961
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0341985
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) WARNING AFTER AN INITIAL EXCHANGE
Personal Author(s):
Carpenter,M B
Report Date:
Nov 1961
Media Count:
11 Page(s)
Report Number(s):
RM-2877PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED
Distribution Statement:
Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0266900

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HOW TO PLAY SAFE. BOOK OF RULES OF THE STRATEGY AND FORCE EVALUATION GAME

Personal Author(s):

HELMER,OLAF

BICKNER,R E

Report Date:

Nov 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0416400

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CAIN-A BOMBING MISSION PLANNING TOOL.

Descriptive Note:

Final rept.,

Personal Author(s):

Dawkins,Barbara A

Report Date:

Nov 1961

Media Count:

13 Page(s)

Report Number(s):

RM-2875-PR

Report Classification:

Unclassified

Distribution Limitation(s):

14 - DOD ONLY; NON-DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0267299

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DISTRIBUTION OF THE INTENSITY AND POLARIZATION OF THE DIFFUSELY REFLECTED LIGHT OVER A PLANETARY DISK

Personal Author(s):

SEKERA,ZDENEK

VIEZEE,WILLIAM

Report Date:

Nov 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0269716

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPERATIONS AND SUPPORT SCHEDULING METHODS DERIVED FROM LABORATORY PROBLEM II (LP-II) - A MANNED ICBM SIMULATION

Personal Author(s):

SWEETLAND,A

Report Date:

Nov 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0267302

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VALUES OF LARGE GAMES. V. AN 18-PERSON MARKET GAME

Personal Author(s):

SHAPLEY,L S

Report Date:

Nov 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0416814

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POSTATTACK DAMAGE ASSESSMENT: A CONCEPTUAL ANALYSIS,

Personal Author(s):

Massell,B F

Winter,S G

Report Date:

Nov 1961

Media Count:

1 Page(s)

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0330178

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMAND-CONTROL AND LIMITED WAR

Personal Author(s):

WEINER,M G

HAVERTY,J P

Report Date:

Nov 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0327435

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ELECTRONIC COUNTERMEASURES AND COUNTER-COUNTERMEASURES IN COMMUNICATION
SATELLITE SYSTEMS

Personal Author(s):

REIGER, S H

Report Date:

Nov 1961

Media Count:

56 Page(s)

Report Number(s):

RM-2840-ARPA

ARPA-189-61

Contract Number:

SD-79

Monitor Series:

189-61

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338918

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUBMARINE-LAUNCHED, SHORT-RANGE MISSILE THREAT IN THE EARLY SIXTIES

Personal Author(s):

Kephart,D C

Catlett,L E

Report Date:

Nov 1961

Media Count:

44 Page(s)

Report Number(s):

RM-2814-ARPA

Contract Number:

SD-79

ARPA Order-189-61

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0411960

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STYLES IN NEGOTIATION: EAST AND WEST ON ARMS CONTROL, 1958-1961,

Personal Author(s):

Leites,N

Report Date:

Nov 1961

Media Count:

1 Page(s)

Report Number(s):

Memo. RM 2838 ARPA

Contract Number:

SD79

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0397308

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NATIONAL EMERGENCY AIRBORNE COMMAND POST,

Personal Author(s):

Northrop,G M

Report Date:

Nov 1961

Media Count:

38 Page(s)

Report Number(s):

RM-2895-PR

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution: Controlled: all requests to Hq., USAF, Deputy Chief of Staff, Research and Development, Directorate of Operational Requirements and Development Plans, Washington, D. C. 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340916

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MICROJET: ITS PROBLEMS AND ITS APPLICATIONS

Personal Author(s):

Jaeger,B F

Report Date:

Nov 1961

Media Count:

13 Page(s)

Report Number(s):

Memo. RM2873ARPA

Contract Number:

SD79

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0326672

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SUGGESTION FOR MEASUREMENT OF VIBRATIONAL EXCITATION IN POLYATOMIC MOLECULES BY MOLECULAR BEAM TECHNIQUES (U)

Personal Author(s):

SILVERA,ISAAC F

Report Date:
Nov 1961
Media Count:
10 Page(s)
Report Number(s):
RM-2910-PR
Contract Number:
AF 49(638)-700
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
ADB193842
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) Communication Satellites and International Frequency Management.
Descriptive Note:
Memorandum rept.,
Personal Author(s):
Proehl, P O
Report Date:
Nov 1961
Media Count:
119 Page(s)
Report Number(s):
RAND/RM-2941-NASA
XG-XD
Contract Number:
NASr-21
Monitor Series:
XD
Report Classification:
Unclassified

Distribution Limitation(s):
12 - U.S. GOVT. AND THEIR CONTRACTORS
Distribution Statement:
Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0341984
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) AIRCRAFT IN-FLIGHT LOAD PICKUP SYSTEM
Personal Author(s):
Murrow,R B
Sturdevant,C V
Report Date:
Oct 1961
Media Count:
22 Page(s)
Report Number(s):
RM-2857PR
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED
Distribution Statement:
Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341982

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A DISTRIBUTED AIR DEFENSE COMMAND CONTROL SYSTEM

Personal Author(s):

Craig,L J

Report Date:

Oct 1961

Media Count:

43 Page(s)

Report Number(s):

RM2867PR

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0268170

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/268170.pdf

Size: 27 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE REAL NATIONAL INCOME OF SOVIET RUSSIA SINCE 1928

Personal Author(s):

Bergson, Abram

Report Date:

Oct 1961

Media Count:

484 Page(s)

Report Number(s):

R-367-PR

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; OCT 1961. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of Staff (Air Force), Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0266129

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET CYBERNETICS AND COMPUTER SCIENCES, 1960

Personal Author(s):

FEIGENBAUM,E A

Report Date:

Oct 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0264781

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POWER-BANDWIDTH TRADE-OFFS FOR FEEDBACK FM SYSTEMS: A COMPARISON WITH PULSE-CODE MODULATION

Personal Author(s):

BEDROSIAN,EDWARD

Report Date:

Oct 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0326319

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SHOCK WAVES IN BUBBLY WATER (U)

Personal Author(s):

PARKIN,BLAINE R

GILMORE,FORREST R

BRODE,HAROLD L

Report Date:

Oct 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB272197

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Shock Waves in Bubbly Water. Isentropic Flow Tables

Descriptive Note:

Memorandum rept.

Personal Author(s):

Parkin, Blaine R

Gilmore, Forrest R

Brode, Harold L

Report Date:

Oct 1961

Media Count:

52 Page(s)

Report Number(s):

RM-2795-PR

XC-USAF

Contract Number:

AF-49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution: Further dissemination only as directed by Dept. of the Air Force, Washington, DC 20330, Oct 61; or higher DoD authority.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0348651

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/348651.pdf

Size: 817 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THEATER AIR SURVIVAL IN ALL-OUT WAR, 1958-1965

Personal Author(s):

Sturdevant, C V

Report Date:

07 Sep 1961

Media Count:

25 Page(s)

Report Number(s):

RAND-RM-1909

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

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Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; 07 SEP 1961. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of SDtaff, Research and Technology, USAF, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0280836

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ISSUE OF NUCLEAR TEST CESSATION AT THE LONDON DISARMAMENT CONFERENCE OF 1957, A
STUDY IN EAST-WEST NEGOTIATION

Report Date:

Sep 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0360964

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A STUDY OF FUTURE LOW-ALTITUDE INTERCONTINENTAL-BOMBER DESIGNS

Descriptive Note:

Research memo.

Personal Author(s):

Johnston, R B

Cartaino, T F

Kirkwood, T F

Weber, Jr, C M

Report Date:

Sep 1961

Media Count:

62 Page(s)

Report Number(s):

RAND/RM-2797-PR

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; SEP 1961. Other requests shall be referred to Deputy Chief of Staff Research and Technology (Air Force), Directorate of Development Planning, Attn: Project Rand Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0325852

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ROCKET-BORNE AND ICBM COMMUNICATIONS FOR EMERGENCY CONTROL OF STRATEGIC FORCES

Personal Author(s):

Eldridge, F R

Eldridge, R A

Reiger, S H

Report Date:

Sep 1961

Media Count:

61 Page(s)

Report Number(s):

RM-2606-PR

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339167

Corporate Author:

RAND CORP SANTA MONICA CA

Descriptive Note:

Research memo.,

Personal Author(s):

Marcum, J I

Report Date:

Sep 1961

Media Count:

50 Page(s)

Report Number(s):

RM-2829-PR

Contract Number:

AF

49(638)-700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0448109

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NUMERICAL SOLUTION OF VARIATIONAL PROBLEMS,

Personal Author(s):

Dreyfus,Stuart

Report Date:

30 Aug 1961

Media Count:

28 Page(s)

Report Number(s):

P2374

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0270548

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GAME SOLUTION OF A MISSILE-LAUNCHING PROBLEM WITH HARD AND SOFT KILL PROBABILITIES

Personal Author(s):

JOHNSON,S M

Report Date:

03 Aug 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0324944

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MOBILE SYSTEM SURVIVAL AGAINST A BALLISTIC SALVO. THE EFFECTS OF POSITION UNCERTAINTY AND OTHER PARAMETERS (U)

Personal Author(s):

STURDEVANT,C V

WEGNER,L H

Report Date:

Aug 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0380562

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME FACTORS CONCERNING HIGH-ALTITUDE MONITORING OF NUCLEAR TEST-BAN AGREEMENTS: VELA HOTEL AND VARIATIONS.

Descriptive Note:

Research memo.,

Personal Author(s):

Stebbins,D W

Brown,W M

Elswick,W R

Report Date:

Aug 1961

Media Count:

68 Page(s)

Report Number(s):

RM-2779-ARPA

Contract Number:

SD-79

ARPA

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution: USGO: others to Advanced Research Projects Agency, Attn: TIO. Washington, D. C. 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0325178

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/325178.pdf

Size: 4 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DEPTH OF COVER FOR SUPERHARD INSTALLATIONS--EFFECTIVENESS AND COST

Personal Author(s):

BRODE, H L

LAUPA, ARMAS

Report Date:

Aug 1961

Media Count:

76 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Aug 1961. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0380561

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SEMIANNUAL PROGRESS REPORT 1 JANUARY-30 JUNE 1961.

Report Date:

31 Jul 1961

Media Count:

15 Page(s)

Report Number(s):

RM-2816-ARPA

Contract Number:

SD-79

ARPA Order-189-61

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: USGO: others to Advanced Research Projects Agency, Attn: TIO. Washington, D. C. 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0352560

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/352560.pdf

Size: 4 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) URBAN BLAST DAMAGE IN THE UNITED STATES AND THE SOVIET UNION BY ZONES - AND
APPLICATION OF THE MUSTARD MODEL

Personal Author(s):

McGarvey, D C

Beachley, Marion

Report Date:

24 Jul 1961

Media Count:

108 Page(s)

Report Number(s):

RM-2690

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 24
Jul 1961. Other requests shall be referred to Deputy Chief of Staff, Directorate of Development Planning
(Air Force), Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0352567

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BINOMIAL SURVIVAL PROBABILITIES FOR U.S. URBANIZED-AREA POPULATIONS, AND THEIR APPLICATION TO WEAPON ALLOCATION,

Personal Author(s):

Lavin,M M

Report Date:

21 Jul 1961

Media Count:

21 Page(s)

Report Number(s):

RM-2737

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0324814

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/324814.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MANPOWER IMPLICATIONS OF SOME AIR FORCE SPACE SYSTEMS

Personal Author(s):

HEUSTON, M C

Report Date:

Jul 1961

Media Count:

43 Page(s)

Report Number(s):

S-149

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Specific authority; 6 Dec 2000.

Other requests shall be referred to Hq. Dept of Air Force, Project RAND, Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0450408

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DETERMINATION OF ORBITS,

Personal Author(s):

Dubyago ,A D

Burke ,R D

Rowell ,L N

Gordon ,G

Smith,F T

Report Date:

Jul 1961

Media Count:

431 Page(s)

Report Number(s):

T85PR

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0261232

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A METHOD OF COMPUTING FALLOUT HAZARD FOR AREAS NEAR A NUCLEAR BLAST

Personal Author(s):

BATTEN,E S

Report Date:

27 Jun 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341118

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME CONSIDERATIONS REGARDING NUCLEAR TESTS IN THE ATMOSPHERE

Personal Author(s):

Latter,Albert L

Report Date:

15 Jun 1961

Media Count:

4 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340401

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROPULSION AND FOCUSING OF SOLID MATERIAL BY A NUCLEAR EXPLOSION

Personal Author(s):

Whitener,Jack E

Report Date:

13 Jun 1961

Media Count:

29 Page(s)

Report Number(s):

RM2699

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339494

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

Davis, Robert A

Report Date:

12 Jun 1961

Media Count:

36 Page(s)

Report Number(s):

S-150

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUN 1961. Other requests shall be referred to Deputy Chief of Staff Research and Technology (Air Force), Directorate of Development Planning, Attn: Project RAND Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0259793

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE INDONESIAN EIGHT-YEAR OVER-ALL DEVELOPMENT PLAN

Personal Author(s):

PAUKER,GUY

Report Date:

09 Jun 1961

Media Count:

1 Page(s)

Report Number(s):

RM-2768

P-2313

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339868

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Initial Cratering and Ground Shock Action - Some Implications for High-Yield Weapon Employment and Superhard Design

Personal Author(s):

Brode, H L

Report Date:

06 Jun 1961

Media Count:

17 Page(s)

Report Number(s):

S140

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 06 JUN 1961. Other requests shall be referred to Deputy Chief of Staff for Research and Technology, Directorate of Development Planning, Department of the Air Force, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0324517

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LONG-ENDURANCE AIRCRAFT ON CONTINUOUS AIRBORNE MISSILE PATROL

Personal Author(s):

BLAKESLEE,D J

MURROW,R B

Report Date:

Jun 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0324462

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BIOLOGICAL PROBLEMS ATTENDANT UPON THE APPLICATION OF BACTERIOLOGICAL AND CHEMICAL AGENTS IN LIMITED WAR

Personal Author(s):

TAMPLIN, A R

Report Date:

Jun 1961

Media Count:

44 Page(s)

Report Number(s):

RM-2677

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224298

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Is Investment Really Unimportant?

Report Date:

01 Jun 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0325179
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) RESEARCH PROBLEMS IN ADVANCED SENSORS FOR SPACE SURVEILLANCE
Personal Author(s):
SWERLING, PETER
Report Date:
Jun 1961
Media Count:
58 Page(s)
Report Number(s):
RM-2718
ARPA-189 61
Contract Number:
SD79
Monitor Series:
189 61
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
ADB185008
Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/b185008.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Geomagnetic Field Distortion by a Solar Stream as a Mechanism for the Production of Polar Aurora and Electronics

Personal Author(s):

Kern, J W

Report Date:

26 May 1961

Media Count:

36 Page(s)

Report Number(s):

XG-NASA

Contract Number:

NAS5-276

Monitor Series:

NASA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 26 MAY 1961. Other requests shall be referred to National Aeronautics and Space Administration, Code AO, 300 E Street, NW, Washington, 20546-0001.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0323779

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME INFRARED DEFENSE SYSTEMS CONSIDERATIONS BASED UPON A NEW MECHANISM OF SUSTAINER ROCKET RADIATION

Personal Author(s):

GELINAS, R W

Report Date:

23 May 1961

Media Count:

49 Page(s)

Report Number(s):

BM-2773

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution: Controlled: All requests to Commander, SAMSO, P. O. Box 92960, Worldway Postal Center, Los Angeles, Calif. 90009.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0264423

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RELATION OF U. S. FALLOUT CASUALTIES TO U. S. AND ENEMY OPTIONS

Personal Author(s):

HANUNIAN,NORMAN A

Report Date:

19 May 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0257577

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE POLITICAL CONSEQUENCES OF A HYPOTHETICAL ARMS CONTROL AGREEMENT

Personal Author(s):

GOLDHAMER,HERBERT

Report Date:

01 May 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338635

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FEASIBILITY OF INTERCONTINENTAL MISSILES HAVING A LOW-LEVEL ATTACK CAPABILITY

Personal Author(s):

Kirkwood,T F

Wikholm,D E

Report Date:

27 Apr 1961

Media Count:

49 Page(s)

Report Number(s):

RM2720

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0258297

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EXAMINATION OF THE USE OF STATISTICAL AGGREGATES TO IMPROVE MANAGEMENT CONTROL
OF LARGE ORGANIZATIONS

Personal Author(s):

WAGNER,HARVEY M

Report Date:

25 Apr 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0449101

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PHOENIX SYSTEM COST, VOLUME II.

Descriptive Note:

Interim rept.

Report Date:

24 Apr 1961

Media Count:

132 Page(s)

Report Number(s):

RM2770BMD

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Release only to U. S. Government agencies is authorized. Other certified requesters shall obtain release approval from Space Systems Div. Air Force Systems Command, Inglewood, Calif. Attn: WDLAP

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0425999

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC GROWTH AND FOREIGN AID: A PROPOSAL CONCERNING THE EXPORT OF INDUSTRIAL PLANT,

Personal Author(s):

Moore, Frederick T

Report Date:

20 Apr 1961

Media Count:

20 Page(s)

Report Number(s):

P2287

Monitor Series:
Unclassified report
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0432469
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) COMPUTER SIMULATION OF HUMAN THINKING,
Personal Author(s):
Newell, Allen
Simon, Herbert A
Report Date:
20 Apr 1961
Media Count:
23 Page(s)
Report Number(s):
P2276
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224296
Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RECENT DEVELOPMENTS IN NONLINEAR PROGRAMMING-PART I,

Personal Author(s):

Wolfe, Philip

Report Date:

17 Apr 1961

Media Count:

32 Page(s)

Report Number(s):

P2063

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341381

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A GUIDE TO THE PROJECTS FOR OPTICAL-INFRARED RADIATION MEASUREMENTS OF BALLISTIC MISSILES ROCKET-POWERED PHASE

Personal Author(s):

Passman, S

Frost, B

Report Date:

05 Apr 1961

Media Count:

74 Page(s)

Report Number(s):

RM-2708ARPA

Contract Number:

SD79

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0343364

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIMITED WAR CONCEPTS AND PROBLEMS

Personal Author(s):

DeWeerd,H A

Report Date:

28 Mar 1961

Media Count:

42 Page(s)

Report Number(s):

S146

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339922

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

Davis, Robert A

Report Date:

16 Mar 1961

Media Count:

31 Page(s)

Report Number(s):

B-250

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0386385

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME INDICATIONS OF SOVIET VIEWS ON THE STRATEGIC EMPLOYMENT OF CW/BW.

Descriptive Note:

Research memo.,

Personal Author(s):

Goure,Leon

Report Date:

16 Mar 1961

Media Count:

43 Page(s)

Report Number(s):

RM-2725

Contract Number:

AF 49(638)-700

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: USGO: others to Hq. USAF, Deputy Chief of Staff, Research and Development, Directorate of Operational Requirements and Development Plans, Washington, D. C. 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0477009

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ACCESSION OF OTHER NATIONS TO THE NUCLEAR TEST BAN,

Personal Author(s):

Zoppo, Ciro E

Report Date:

Mar 1961

Media Count:

88 Page(s)

Report Number(s):

RM-2730-ARPA

Contract Number:

SD-79

ARPA Order-189-61

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: No Foreign without approval of Advanced Research Projects Agency, Washington, D. C.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0324371

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REVIEW OF BAMBI

Personal Author(s):

EMERSON,D E

Report Date:

Mar 1961

Media Count:

51 Page(s)

Report Number(s):

S-144

ARPA-189 61

Contract Number:

SD79

Monitor Series:

189 61

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0324370

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN INVESTIGATION OF ORBITING INTERCEPTOR (BAMBI) TERMINAL GUIDANCE

Personal Author(s):

HUTCHESON, J H

Report Date:

Mar 1961

Media Count:

73 Page(s)

Report Number(s):

RM-2729

ARPA-189 61

Contract Number:

SD79

Monitor Series:

189 61

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0324369

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SURVEY OF BAMBI COUNTERMEASURES

Personal Author(s):

ROSEN, J H

Report Date:

Mar 1961

Media Count:

97 Page(s)

Report Number(s):

RM-2732 20c

ARPA-189 61

Contract Number:

SD79

Monitor Series:

189 61

Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0324368
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) BAMBI INTERCEPTOR PERFORMANCE AND EFFECTIVENESS
Personal Author(s):
PARKER,T M
Report Date:
Mar 1961
Media Count:
171 Page(s)
Report Number(s):
RM-2733
ARPA-189 61
Contract Number:
SD79
Monitor Series:
189 61
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0254863
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) VALUES OF LARGE GAMES, II. OCEANIC GAMES
Personal Author(s):
MILNOR,J W
SHAPLEY,L S
Report Date:
28 Feb 1961
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0345583
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/345583.pdf
Size: 1 MB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) NOVEL DISTRIBUTION SCHEME
Personal Author(s):
Holbrook, R D
Report Date:
28 Feb 1961
Media Count:
66 Page(s)
Report Number(s):
XT-ARPA
Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Other requests shall be referred to ARPA, Arlington, VA.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339197

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) How to Create a Greater Crater.

Personal Author(s):

Brode,H L

Report Date:

08 Feb 1961

Media Count:

13 Page(s)

Report Number(s):

RM2704

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0332645

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMITMENT, RETARGETING, AND RELATED COMMUNICATIONS FOR A B-52 AIRBORNE ALERT FORCE

Personal Author(s):

ATTAWAY,L D

Report Date:

Feb 1961

Media Count:

1 Page(s)

Report Number(s):

RM-2727-ARPA

Contract Number:

AF 49(638)-710

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0322588

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A RADAR DIRECTORY

Personal Author(s):

SOLTWEDEL,E B

Report Date:

Feb 1961

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0330177

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON SPACE WEAPONS OF MASS DESTRUCTION. MILITARY ISSUES, POLITICAL RISKS OF PROPOSING A FORMAL BAN, AND ALTERNATIVE APPROACHES (U)

Personal Author(s):

DADANT,PHILIP M

IKLE,FRED CHARLES

Report Date:

Feb 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0323891

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LONG-DISTANCE COMMUNICATION VIA REFLECTION FROM ORBITING LONG WIRES

Personal Author(s):

REIGER,S H
Report Date:
Feb 1961
Media Count:
1 Page(s)
Report Number(s):
ARPA-189 61
Contract Number:
SD79
Monitor Series:
189 61
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
ADB185909
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) The Forces Between Conducting Spheres in a Electric Field,
Personal Author(s):
Davis, M H
Report Date:
26 Jan 1961
Media Count:
47 Page(s)
Report Number(s):
RAND/RM-2607
XC-USAF
Contract Number:
AF 49(638)-700
Monitor Series:
USAF
Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0257287

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROCEDURES FOR THE DETERMINATION OF DISTRIBUTIONAL CLASSES

Personal Author(s):

HARPER,KENNETH E

Report Date:

23 Jan 1961

Media Count:

1 Page(s)

Report Number(s):

AFOSR-149

Contract Number:

AF49 638 737

Monitor Series:

149

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0322073

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SOVIET CIVIL DEFENSE PROGRAM. A TRIP REPORT

Descriptive Note:

Research memo.

Personal Author(s):

GOURE, LEON

Report Date:

05 Jan 1961

Media Count:

61 Page(s)

Report Number(s):

RAND-RM-2684

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0252243

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEUTRON BRANCHING PROCESSES

Personal Author(s):

MULLIKIN,T W

Report Date:

04 Jan 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0254190

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ADAPTIVE CONTROL PROCESSES: A GUIDED TOUR

Personal Author(s):

BELLMAN,RICHARD

Report Date:

Jan 1961

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0253635

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN MACHINE TRANSLATION--6: MANUAL FOR CODING RUSSIAN GRAMMAR

Personal Author(s):

HARPER,K E

HAYS,D G

MOHR,D V

Report Date:

29 Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0252908

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A METHOD FOR DETERMINING APPROXIMATE PROPULSION CUTOFF CONDITIONS FOR BALLISTIC
INTERPLANETARY TRAJECTORIES

Personal Author(s):

ROWELL,L N

Report Date:

29 Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0235801

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SIMULATION OF HUMAN THOUGHT

Personal Author(s):

NEWELL, A

SIMON, H A

Report Date:

28 Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0343411

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DISCUSSION OF BMEWS COUNTERMEASURES

Personal Author(s):

Brennan,L E

Mallett,J D

Report Date:

21 Dec 1960

Media Count:

235 Page(s)

Report Number(s):

RM2487

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0252753

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A STUDY OF THE FEASIBILITY OF DETECTING NUCLEAR EXPLOSIONS BY MEANS OF ANTINEUTRINOS

Personal Author(s):

HUNDLEY,R O

Report Date:

19 Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338919

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MORE EXACT TRAJECTORIES OF OBJECTS EJECTED FROM A BALLISTIC VEHICLE

Personal Author(s):

Drew,P G

Report Date:

15 Dec 1960

Media Count:

27 Page(s)

Report Number(s):

RM2633

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0252242

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE POSSIBLE USE OF ATOMIC NUCLEI AS A DIRECTION REFERENCE IN INERTIAL SPACE

Personal Author(s):

CULVER,W H

Report Date:

13 Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0321259

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

FRICK,RICHARD H

Report Date:

Dec 1960

Media Count:

81 Page(s)

Report Number(s):

RM-2679

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0255552

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLITICAL IMPLICATIONS OF POSTURE CHOICES

Personal Author(s):

GOLDHAMMER,HERBERT

Report Date:

01 Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0321151

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TRAJECTORIES FOR A POSSIBLE SOVIET VENUS SHOT IN JANUARY 1961

Personal Author(s):

ROWELL, L N

Report Date:

Dec 1960

Media Count:

51 Page(s)

Report Number(s):

RM-2700

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0252114

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GEOMAGNETIC FIELD LINES IN SPACE

Personal Author(s):

VESTINE,E H

SIBLEY,W L

Report Date:

Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0250725

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONCEPTS FOR ESTIMATING AIR FORCE MANPOWER REQUIREMENTS FOR PLANNING PURPOSES

Personal Author(s):

HEUSTON,M C

Report Date:

01 Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0321852

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN ELECTROMAGNETIC ENVIRONMENTAL FACILITY (EMEF) (U)

Personal Author(s):

LUSTGARTEN, M N

SOLTWEDEL, E B

DAVIE, M C

Report Date:

Dec 1960

Media Count:

234 Page(s)

Report Number(s):

RM-2644

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0322610

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BRITISH DEFENSE POLICY IN TRANSITION

Personal Author(s):

DEWEERD,H A

Report Date:

Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0323231

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MILITARY POWER AND THE COLD WAR: THE CASE OF WEST BERLIN

Personal Author(s):

GEORGE,A L

Report Date:

Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0322860

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A DISTRIBUTED COMMAND AND CONTROL SYSTEM CONFIGURATION (U)

Personal Author(s):

BARAN,PAUL

Report Date:

Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0322689

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECTIVENESS OF MULTIPLE GROUND LOCATIONS FOR INFRARED SIGHTINGS OF RE-ENTERING ICBM'S

Personal Author(s):

SARTOR,J D

WALTERS,P A

Report Date:

Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0322587

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TWO ICBM PERFORMANCE VARIATIONS AS A COUNTER TO BAMBI

Personal Author(s):

OELSCHLAGER, R T

Report Date:

Dec 1960

Media Count:

37 Page(s)

Report Number(s):

RM-2635

ARPA-91-59

Contract Number:

AF49 638 710

Monitor Series:

91-59

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09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0322787

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DISTRIBUTED BACKBONE COMMUNICATIONS SYSTEM

Personal Author(s):

BARAN,P

Report Date:

Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224301

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Identifying R and D - A Management Problem,

Report Date:

01 Dec 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0461188

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USE OF MAN-MACHINE SIMULATION FOR SUPPORT PLANNING,

Personal Author(s):

Geisler,Murray A

Report Date:

Dec 1960

Media Count:

8 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338612

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON MONITORING ARMS CONTROL AGREEMENTS ON USES OF ROCKETS AND SPACE

Personal Author(s):

Dadant,P M

Report Date:

28 Nov 1960

Media Count:

191 Page(s)

Report Number(s):

RM2687ARPA

Contract Number:

AF49 638 710

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0253000

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET NATIONAL INCOME AND PRODUCT, 1928-48: REVISED DATA

Personal Author(s):

BERGSON,ABRAM

HEYMANN,HANS JR

HOEFFDING,OLEG

Report Date:

15 Nov 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

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Full Text (pdf) Availability:

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File: /UL/b212072.pdf

Size: 4 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Lao Elite: A Study of Tradition and Innovation.

Descriptive Note:

Research memo.,

Personal Author(s):

Halpern, J M
Report Date:
15 Nov 1960
Media Count:
96 Page(s)
Report Number(s):
RAND/RM-2636-RC
X0-XD
Monitor Series:
XD
Report Classification:
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12 - U.S. GOVT. AND THEIR CONTRACTORS
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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0252159
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) MINIMUM-WEIGHT PROPORTIONS OF PRESSURE VESSEL HEADS
Personal Author(s):
HOFFMAN,GEORGE A
Report Date:
11 Nov 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0252909

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MEASUREMENTS OF SPHERE DRAG FROM HYPERSONIC CONTINUUM TO FREE-MOLECULE FLOW

Personal Author(s):

MASSON,D J

MORRIS,D N

BLOXSOM,DANIEL E

Report Date:

03 Nov 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0250239

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VALUES OF LARGE GAMES. I. A LIMIT THEOREM

Personal Author(s):

SHAPLEY,L S

SHAPIRO,N Z

Report Date:

02 Nov 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0322882

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) USE OF HYDROGEN AS A FUEL FOR LARGE-PAYLOAD, LONG-ENDURANCE AIRPLANES (U)

Personal Author(s):

KIRKWOOD,T F

CARTAINO,T F

Report Date:

Nov 1960

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0320200

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CHARACTERISTICS OF MANNED STOL AIRCRAFT FOR TACTICAL MISSIONS (U)

Personal Author(s):

GREENE, T E
SMITH, G K
Report Date:
Nov 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0223481
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) SIMULATION OF ICBM SUPPORT (U)
Personal Author(s):
RAUNER, R M
STEGER, W A
Report Date:
01 Nov 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0322883

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EVALUATING U.S. MILITARY ASSISTANCE IN LESS-DEVELOPED COUNTRIES: A COMPARISON OF
ALTERNATIVE PROGRAMS IN VIET NAM AND IRAN (U)

Personal Author(s):

WOLF, CHARLES

CLARK, PAUL G

Report Date:

Nov 1960

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224307

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Multiple Regression Analysis of a Poisson Process,

Report Date:

31 Oct 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224068

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GAMING LIMITED WAR.

Personal Author(s):

Weiner,M G

Report Date:

27 Oct 1960

Media Count:

12 Page(s)

Report Number(s):

P2123

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0250552

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OBLATENESS PERTURBATIONS OF NEAR-EARTH SATELLITES

Personal Author(s):

MULLIKIN,T W

Report Date:

25 Oct 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224069

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Perspectives of Dynamic Programming.

Report Date:

24 Oct 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0249503

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DESIGN CRITERIA FOR ROTATING SPACE VEHICLES

Personal Author(s):

DOLE, S H

Report Date:

18 Oct 1960

Media Count:

19 Page(s)

Report Number(s):

RM-2668

Contract Number:

AF

49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

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23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: No Forn. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339456

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN INITIAL EXAMINATION OF THE PROBLEM OF STRIKING POSSIB SOVIET MOBILE MISSILES

Personal Author(s):

Lind,J R

Wegner,L H

Report Date:

17 Oct 1960

Media Count:

73 Page(s)

Report Number(s):

RM2663

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0252609

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN MACHINE TRANSLATION--12: A GLOSSARY OF RUSSIAN PHYSICS

Personal Author(s):

KOZAK,A S

SMITH,C H

Report Date:

14 Oct 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224067

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Contextual Study Method as a Device for Studying Limited War Strategies.

Report Date:

10 Oct 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224300

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXPERIENCE IN THE USE OF A SIMULATION LABORATORY IN THE DESIGN OF A MANAGEMENT INFORMATION SYSTEM,

Report Date:

03 Oct 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0247322

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DISCUSSION OF A MIDCOURSE GUIDANCE TECHNIQUE FOR SPACE VEHICLES

Personal Author(s):

SMITH,F T

Report Date:

03 Oct 1960

Media Count:

51 Page(s)

Report Number(s):

RM-2581

Contract Number:

AF-49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: No Forn, Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0321237

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SPEEDING UP THE PLANNING PROCESS (U)

Personal Author(s):

DALKEY,N C

Report Date:

Oct 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0420930

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ATTITUDES TOWARD INTELLIGENT MACHINES

Personal Author(s):

Armer, Paul

Report Date:

30 Sep 1960

Media Count:

27 Page(s)

Report Number(s):

P2114

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: No Forn. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0419901

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FACTS AND MORALS IN THE ARMS DEBATE,

Personal Author(s):

Levine,R A
Report Date:
30 Sep 1960
Media Count:
24 Page(s)
Report Number(s):
P2025
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0250381
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) OPTIMUM STRESS DESIGN OF A ROTATING WIRE ANTENNA
Personal Author(s):
FRICK,R H
Report Date:
27 Sep 1960
Media Count:
1 Page(s)
Report Number(s):
ARPA-91-59
Contract Number:
AF49 638 710
Monitor Series:
91-59
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0246277

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VALUES OF LARGE GAMES IV: EVALUATING THE ELECTORAL COLLEGE BY MONTECARLO TECHNIQUES

Personal Author(s):

MANN,IRWIN

SHAPLEY,L S

Report Date:

19 Sep 1960

Media Count:

41 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0245822

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SELECTED LIST OF UNCLASSIFIED PUBLICATIONS OF THE SOCIAL SCIENCE DIVISION, THE RAND CORPORATION 1948-1960

Report Date:

15 Sep 1960

Media Count:

39 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224299
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE USE OF PROTOCOLS IN PROGRAMMING RESEARCH,
Report Date:
12 Sep 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0247711
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE LP-II DATA PROCESSING SYSTEM
Personal Author(s):
LABINER,K H
TUPAC,J D
Report Date:
10 Sep 1960
Media Count:

77 Page(s)
Report Number(s):
RM-2572
Contract Number:
AF-49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0250237
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) GROUPING AND DEPENDENCY THEORIES
Personal Author(s):
HAYS,DAVID G
Report Date:
08 Sep 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0417971
Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIQUID PROPELLANT ROCKETS - 1960,

Personal Author(s):

Goldsmith,Martin

Report Date:

08 Sep 1960

Media Count:

9 Page(s)

Report Number(s):

P2095

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0320615

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MALFUNCTION-GENERATION MODEL USED IN THE RAND LOGISTICS LABORATORY SIMULATION
OF AN ICBM SQUADRON (U)

Personal Author(s):

BEAN,ELOISE E

STEGER,WILBUR A

Report Date:

Sep 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0249507

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF THE MILITARY IN INDONESIA

Personal Author(s):

PAUKER,G J

Report Date:

01 Sep 1960

Media Count:

65 Page(s)

Report Number(s):

RM-2637-RC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0323444

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Methods for Evaluation and Guidance of Materials Research and Development. Proceedings of a Symposium, March 29-31, 1960.

Personal Author(s):

MICKS,WILLIAM R

Report Date:

Sep 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0257939

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BRITISH PARLIAMENTARY AND PRESS REACTIONS TO THE ABANDONMENT OF THE BLUE STREAK PROGRAM,

Personal Author(s):

Schnitzer,E W

Report Date:

01 Sep 1960

Media Count:

35 Page(s)

Report Number(s):

RM-2608

Contract Number:

AF 49(638)700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0318967
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) TRAJECTORIES FOR A POSSIBLE SOVIET MARS SHOT (U)
Personal Author(s):
ROWELL, L N
Report Date:
Sep 1960
Media Count:
67 Page(s)
Report Number(s):
RM-2642
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

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Citation Format: FOIA(UL)

Accession Number:
AD0322495
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) MISSILE DETECTION AND DISCRIMINATION (U)
Report Date:
Sep 1960
Media Count:
1 Page(s)
Report Classification:
SECRET
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0255551

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AUTOMATIC CHECKOUT EQUIPMENT: EMPLOYMENT AND DESIGN CONSIDERATIONS

Personal Author(s):

FIRSTMAN,SIDNEY I

KAMINS,MILTON

VOOSEN,BERNARD J

Report Date:

Sep 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339285

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROTATIONAL MOTION OF A ROD ENTERING THE EARTH'S ATMOSPHERE

Personal Author(s):

Raymond,Joseph L

Report Date:

31 Aug 1960

Media Count:

41 Page(s)

Report Number(s):

RM-2629

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224297

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Implications of Some Gamr-Theoretic Analysis for War Gaming,

Report Date:

25 Aug 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0419904

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE IMBEDDING OF GRAPHS IN MANIFOLDS,

Personal Author(s):

Youngs,J W T

Report Date:

23 Aug 1960

Media Count:

13 Page(s)

Report Number(s):

P2081

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0248078

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RECENT COMMUNIST TACTICS IN INDONESIA

Personal Author(s):

PAUKER,GUY

Report Date:

15 Aug 1960

Media Count:

22 Page(s)

Report Number(s):

RM-2619-RC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADC960779

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Social Science Division Discussions of U-2 and Its Consequences.

Descriptive Note:

Interim summary rept.,

Personal Author(s):

Thomson, C A

Report Date:

12 Aug 1960

Media Count:

13 Page(s)

Report Number(s):

X0-XD

Monitor Series:

XD

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0245175

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AUTOMATIC INDEXING: AN EXPERIMENTAL INQUIRY

Personal Author(s):

MARON,M E

Report Date:

10 Aug 1960

Media Count:

37 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0249678

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE IBM 704 COMPUTER COMMUNICATIONS VULNERABILITY MODEL

Personal Author(s):

REINERTSEN,R W

Report Date:

05 Aug 1960

Media Count:

21 Page(s)

Report Number(s):

S-135

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224295

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Korean War: Political Limitations,

Report Date:

05 Aug 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0250238

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GEOLOGICAL COVERING MATERIALS FOR DEEP UNDERGROUND INSTALLATIONS

Personal Author(s):

GENENSKY,S M

LOOFBOUROW,R L

Report Date:

04 Aug 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0251921

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUMMARY OF ORBITAL AND PHYSICAL DATA FOR THE PLANET MARS

Personal Author(s):

KIRBY,DONNA SCOTT

Report Date:

01 Aug 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0252699

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INQUIRY INTO THE FEASIBILITY OF WEATHER RECONNAISSANCE FROM A SATELLITE VEHICLE

Personal Author(s):

GREENFIELD,S M

KELLOGG,W W

Report Date:

Aug 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0320776

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ENGINEERING ANALYSIS OF A PROPOSED SUBMERSIBLE MISSILE-LAUNCHING PLATFORM

Report Date:

Aug 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0243812

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NEW BEGINNING IN NATO LOGISTICS

Personal Author(s):

MENDERSHAUSEN,HORST

Report Date:

01 Aug 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0322074

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SOVIET CIVIL DEFENSE PROGRAM

Personal Author(s):

GOURE, LEON

Report Date:

Aug 1960

Media Count:

376 Page(s)

Report Number(s):

RM-2564

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0321489

Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) PARROT. A DISPERSED ACTIVE-RELAY COMMUNICATION SATELLITE SYSTEM
Personal Author(s):
REIGER, SIEGFRIED
FELDMAN, N E
Report Date:
Aug 1960
Media Count:
128 Page(s)
Report Number(s):
RM-2626
Contract Number:
AF49(638)-710
ARPA Order-91-59
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0320616
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE MISSILE AND ITS LOGISTIC CHARACTERISTICS IN LP-II (U)
Personal Author(s):
SOKOL,PHYLLIS Y
VOOSEN,B J
Report Date:
Aug 1960
Media Count:
1 Page(s)
Report Number(s):
NAVWEPS-6542

Monitor Series:

6542

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0319933

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TARGETEER (U)

Personal Author(s):

DANTZIG,G B

FULKERSON,D R

Report Date:

Aug 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0320246

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET BLOC MILITARY ASSISTANCE (U)

Personal Author(s):

AMIR,HERTA HORNY

Report Date:

Aug 1960

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340558

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

Kecskemeti, Paul

Blumenthal, I S

Lipson, Leon

Jessup, P C

Report Date:

01 Aug 1960

Media Count:

108 Page(s)

Report Number(s):

RM-2588

Contract Number:

AF49

638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

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Distribution Statement:

Distribution: Controlled: All requests to Commander, SAMSO, P. O. Box 92960, Worldway Postal Center, Los Angeles, Calif. 90009.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0461161

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DESCRIPTIVE GUIDE TO A CARD DIRECTORY OF U. S. MILITARY RADIO COMMUNICATION EQUIPMENT.

Descriptive Note:

Research memo.,

Personal Author(s):

Reinhart,E E

Backus,W A

Heisler,K G ,Jr

Report Date:

31 Jul 1960

Media Count:

87 Page(s)

Report Number(s):

RM-2445

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224293

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Interactions of Infrared Radiation with the Atmosphere-A Guide to the Modern Literature,

Report Date:

26 Jul 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0245580

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NORWAY'S ROLE IN WESTERN DEFENSE: SOME NORWEGIAN VIEWPOINTS

Personal Author(s):

ROBBINS,JAMES J

Report Date:

25 Jul 1960

Media Count:

76 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0246819
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOCIAL PATTERNS IN THE HUNGARIAN REVOLUTION
Personal Author(s):
KECSKEMETI,PAUL
Report Date:
20 Jul 1960
Media Count:
233 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0243218
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A NOTE ON POLYNOMIAL AND SEPARABLE GAMES
Personal Author(s):
GALE,DAVID
GROSS,OLIVER
Report Date:
20 Jul 1960
Media Count:
1 Page(s)
Report Number(s):
373 1
Report Classification:
Unclassified
Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224294

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Atmospheric Entry.

Report Date:

15 Jul 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0247679

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RAND PUBLICATIONS ON RELIABILITY

Personal Author(s):

STOLLER,DAVID S

Report Date:

15 Jul 1960

Media Count:

15 Page(s)

Report Number(s):

RM-2613
Contract Number:
AF-49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0249679
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) STUDIES IN MACHINE TRANSLATION--8: MANUAL FOR POSTEDITING RUSSIAN TEXT
Personal Author(s):
HARPER,K E
HAYS,D G
SCOTT,B J
Report Date:
15 Jul 1960
Media Count:
38 Page(s)
Report Number(s):
RM-2068
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311389

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/311389.pdf

Size: 337 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GAMMA RAYS FROM THERMAL NEUTRON CAPTURES IN SUNLAMP

Descriptive Note:

Research memo.

Personal Author(s):

Latter, A L

Marcum, J I

May, M M

Report Date:

06 Jul 1960

Media Count:

13 Page(s)

Report Number(s):

RAND/RM-2199

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUL 1960. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of Staff, Development, Hq, USAF, Project Rand Office, Washington DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0319407

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PERTURBING EFFECTS OF SOLAR RADIATION PRESSURE ON EARTH SATELLITE ORBITS

Personal Author(s):

LEVIN,E

Report Date:

Jul 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0242934

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEUTRON FLUXES IN AIR. A COMPARISON OF MONTE CARLO CODE COMPUTATIONS BY RAND, LOS ALAMOS, AND SANDIA

Personal Author(s):

MARCUM,J I

Report Date:

01 Jul 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0320493

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FIREBALL RISE FOR A HIGH-ALTITUDE NUCLEAR EXPLOSION

Personal Author(s):

BRODE,H L

Report Date:

Jul 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0318286

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CONTINUING REQUIREMENT FOR MANNED WEAPON SYSTEMS

Personal Author(s):

BLACHLY,R L

SCHAMBERG,R

Report Date:

Jul 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244698

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) "DETERRENCE" AND SURPRISE ATTACK IN SOVIET STRATEGIC THOUGHT

Personal Author(s):

HORELICK,A L

Report Date:

01 Jul 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224291

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Conflict Resolution in the Sino-Soviet Alliance,

Report Date:

01 Jul 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0240121

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SELECTED LIST OF UNCLASSIFIED PUBLICATIONS OF THE ECONOMICS DIVISION OF THE RAND CORPORATION

Descriptive Note:

Research memo.

Report Date:

30 Jun 1960

Media Count:

41 Page(s)

Report Number(s):

RM-821-7

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0245101

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXTENSION OF THE "WKB" APPROXIMATION OF HIGH FREQUENCY SCATTERING BY A DIELECTRIC SPHERE. PART I. GENERAL EXPRESSIONS

Personal Author(s):

SEKERA,ZDENEK

Report Date:

30 Jun 1960

Media Count:

37 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0250380

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CRATERING FROM A MEGATON SURFACE BURST

Personal Author(s):

BRODE,H L

BJORK,R L

Report Date:

30 Jun 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0319003

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN OPERATIONAL MOBILE MISSILE FORCE USING DISPERSED, SEA-GOING BARGES

Personal Author(s):

REINHARDT,G C

GOOD,G F

Report Date:

30 Jun 1960

Media Count:

47 Page(s)

Report Number(s):

RM-2559

Contract Number:

AF49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0355422

Full Text (pdf) Availability:

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File: /UL/355422.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MANAGING STRIKE ALERT COMMITMENTS

Personal Author(s):

Smith, T C

Report Date:

24 Jun 1960

Media Count:

62 Page(s)

Report Number(s):

RAND-RM-2599

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0241289

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPLICATION OF A NETWORK FLOW MODEL TO PERSONNEL PLANNING

Personal Author(s):

GORHAM, WILLIAM

Report Date:

24 Jun 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0318398

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THOR AND ATLAS IN-FLIGHT RELIABILITY GROWTH (U)

Personal Author(s):

MADANSKY, ALBERT

PEISAKOFF, M P

Report Date:

22 Jun 1960

Media Count:

17 Page(s)

Report Number(s):

RM-2598

Contract Number:

AF49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224287

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Optimal Inventory Policy for Serviceable and Repairable Stocks.

Report Date:

21 Jun 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224290

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Chinese Genie: Peking's Role in the Nuclear Test Ban Negotiations,

Report Date:

20 Jun 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0240594

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CHINESE GENIE: PEKING'S ROLE IN THE NUCLEAR TEST BAN NEGOTIATIONS

Personal Author(s):

HSIEH,A L

Report Date:

20 Jun 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0322154

Full Text (pdf) Availability:

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File: /UL/322154.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A POSSIBLE APPLICATION OF LONG-ENDURANCE AIR-PLANES--AIRBORNE CONTROL CENTERS

Personal Author(s):

SKAVDAHL, HOWARD

Report Date:

16 Jun 1960

Media Count:

31 Page(s)

Report Number(s):

S-134

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0321326

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AIRBORNE COMMUNICATIONS AND CONTROL MISSION COSTS: COST SENSITIVITY ANALYSIS USING DROMEDARIES, KC-135'S AND C-130'S

Personal Author(s):

SUMMERS,M B

WARD,G P

Report Date:

15 Jun 1960

Media Count:

80 Page(s)

Report Number(s):

RM-2589

Contract Number:

AF49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244107

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNIST STRATEGY IN LAOS

Personal Author(s):

HALPERN,A M

FREDMAN,H B

Report Date:

14 Jun 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

ADD503980

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FAR-FIELD BACK-SCATTERING FROM A OF A BODY OF REVOLUTION, IN: SYMPOSIUM ON THE OF MISSILES, PART IV, P13-23

Personal Author(s):

RAYMOND,J L

Report Date:

10 Jun 1960

Media Count:

16 Page(s)

Report Number(s):

Report Classification:

SECRET

Distribution Limitation(s):

15 - CONTROLLED; NON-DOD CONTROLLED

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0241523

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYMMETRIC GAMES

Personal Author(s):

SHAPLEY,L S

Report Date:

09 Jun 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224288

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ONE DIMENSIONAL EXPANSION OF A FINITE MASS OF GAS INTO VACUUM,

Personal Author(s):

Greifinger,C

Cole,J D

Report Date:

06 Jun 1960

Media Count:

33 Page(s)

Report Number(s):

P2008

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0319720

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MISSILE DETECTION AND DISCRIMINATION

Personal Author(s):

GROSS,JOSEPH F

Report Date:

Jun 1960

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0319826

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECT OF CHAFF ON FREQUENCY-DIVERSITY SURVEILLANCE RADARS

Personal Author(s):

MALLETT,J D

Report Date:

Jun 1960

Media Count:

39 Page(s)

Report Number(s):

RM-2457

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0320056

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUBMERSIBLE BASING FOR ICBM'S

Personal Author(s):

JOHNSON,ROGER P

JOHNSON,LELAND L

Report Date:

Jun 1960

Media Count:

1 Page(s)

Report Number(s):

RM-2596

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0319608

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DESIRABLE TANKER USE FOR AIRBORNE ALERT OPERATIONS

Personal Author(s):

MURROW, R B

STURDEVANT, C V

MILLS, R G

Report Date:

Jun 1960

Media Count:

1 Page(s)

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0418652
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) GUIDELINES IN ACCUMULATING FINANCIAL DATA ON FUTURE WEAPONS,
Personal Author(s):
Pardee,F S
Report Date:
27 May 1960
Media Count:
46 Page(s)
Report Number(s):
RM-2583
Contract Number:
AF49 638 710
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0317937
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) ELECTROMAGNETIC ENVIRONMENT ON THE NORTHEASTERN UNITED STATES
Personal Author(s):
SOLTWEDEL, E B
Report Date:
25 May 1960
Media Count:
475 Page(s)
Report Number(s):
RM-2342
Contract Number:

AF
49(638)700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0311394
Full Text (pdf) Availability:
View Full Text (pdf)
File: /UL/311394.pdf
Size: 4 MB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) THE CENTURY SERIES FIGHTERS: A STUDY IN RESEARCH AND DEVELOPMENT
Descriptive Note:
Research memo.
Personal Author(s):
Johnson, L L
Report Date:
20 May 1960
Media Count:
113 Page(s)
Report Number(s):
RAND/RM-2549
XC-AFRDC
Contract Number:
AF 49(638)-700
Monitor Series:
AFRDC
Report Classification:
Unclassified
Distribution Limitation(s):
03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; MAY 1960. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of Staff, Development, Hq, USAF, Project Rand Office, Washington DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311471

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE NIKE-HERCULES ANTIAIRCRAFT GUIDED MISSILE SYSTEM IN THE ICBM ERA

Descriptive Note:

Research memo.

Personal Author(s):

Rosen, J H

Report Date:

19 May 1960

Media Count:

53 Page(s)

Report Number(s):

RAND/RM-2531

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; MAY 1960. Other requests shall be referred to Hqs. USAF, Directorate of Development Planning, Deputy Chief of Staff, Attn: AFRDP/Project Rand Office, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0251281

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/251281.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A BRIEF STUDY OF ROCKET-POWERED MAGNETOHYDRODYNAMIC GENERATORS AND ENERGY-STORAGE DEVICES

Descriptive Note:

Working paper

Personal Author(s):

Huth, J H

Report Date:

19 May 1960

Media Count:

49 Page(s)

Report Number(s):

RAND/RM-2522-ARPA

XD-ARPA

Contract Number:

AF 49(638)-710

ARPA ORDER-91-59

Monitor Series:

ARPA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 1960. Other requests shall be referred to Defense Advanced Research Projects Agency, 3701 N. Fairfax Dr., Arlington, VA 22203-1714.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0616669

Full Text (pdf) Availability:

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File: /UL/616669.pdf

Size: 5 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A HEURISTIC PROGRAM FOR ASSEMBLY LINE BALANCING

Personal Author(s):

Tonge, Fred M

Report Date:

18 May 1960

Media Count:

149 Page(s)

Report Number(s):

RAND-P-1993

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 18 MAY 1960. Other requests shall be referred to Department of Defense, Attn: Public Affairs Office, Washington, DC 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0258955

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INFORMATION PROCESSING LANGUAGE V MANUAL. SECTION I. THE ELEMENTS OF IPL
PROGRAMMING

Personal Author(s):

NEWELL,A

TONGE,F M

Report Date:

16 May 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0241133

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INDEXES OF SOVIET INDUSTRIAL OUTPUT. VOLUME II

Personal Author(s):

KAPLAN,NORMAN M

MOORSTEEN,RICHARD H

WAINSTEIN,ELEANOR S

Report Date:

13 May 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224632

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OBSERVATIONS OF CONTEMPORARY BURMA,

Personal Author(s):

Johnstone, William C

Report Date:

09 May 1960

Media Count:

70 Page(s)

Report Number(s):

RM-2535-RC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224053

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Failures of the World Bank Missions.

Report Date:

06 May 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0336115

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CAPABILITY OF A SEISMIC SYSTEM

Personal Author(s):

Latter,R

Karzas,W J

Lelevier,R E

Report Date:

06 May 1960

Media Count:

1 Page(s)

Report Number(s):

RM2568AFT

Contract Number:

AF33 600 36527

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0241288

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIGNAL DETECTION IN A NOISY WORLD

Personal Author(s):

HUGGINS,W H

Report Date:

03 May 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0245345

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VEHICLES FOR EXPLORATION ON MARS

Personal Author(s):

CARTAINO,T F

Report Date:

30 Apr 1960

Media Count:

27 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: No forn, Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224321

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC ASPECTS OF DEVELOPING AND ORBITING A SPACE STATION.

Personal Author(s):

Margolis,M

Report Date:

20 Apr 1960

Media Count:

9 Page(s)

Report Number(s):

P-1975

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0242398

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECT OF FILAMENTARY MATERIALS ON PRESSURE-VESSEL DESIGN

Personal Author(s):

HOFFMAN,GEORGE A

Report Date:

19 Apr 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0318024

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AGE AND USAGE FACTORS AFFECTING MISSILE RELIABILITY: A STUDY BASED ON NIKE-AJAX
EXPERIENCE

Personal Author(s):

MCGLOTHLIN,WILLIAM H

STOLLER,DAVID S

Report Date:

15 Apr 1960

Media Count:

50 Page(s)

Report Number(s):

RM-2560

Contract Number:

AF 49(638) 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224320

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

13 Apr 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224319

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETERRENCE OF UNLIMITED WAR: A PROPOSITIONAL OUTLINE,

Report Date:

11 Apr 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0245407

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POWERPLANTS FOR ATMOSPHERIC AND SURFACE VEHICLES ON MARS

Personal Author(s):

KRASE,W H

Report Date:

10 Apr 1960

Media Count:

31 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224318

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AUTOMATIC CONTENT ANALYSIS: SOME ENTRIES FOR A TRANSFORMATION CATALOG.

Personal Author(s):

Hays,D G

Report Date:

08 Apr 1960

Media Count:

20 Page(s)

Report Number(s):

P-1962

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0616595

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METEOROIDS VERSUS SPACE VEHICLES,

Personal Author(s):

Bjork,R L

Report Date:

04 Apr 1960

Media Count:

21 Page(s)

Report Number(s):

P-1963

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0237790

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPROXIMATE CONFIDENCE LIMITS FOR THE RELIABILITY OF SERIES AND PARALLEL SYSTEMS

Personal Author(s):

MADANSKY,ALBERT

Report Date:

04 Apr 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0238096
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) STUDIES IN MACHINE TRANSLATION--10: RUSSIAN SENTENCE-STRUCTURE DETERMINATION
Personal Author(s):
HAYS,D G
ZIEHE,T W
Report Date:
01 Apr 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0319408
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON RE-ENTRY BODIES, RADAR DECOYS, AND CAMOUFLAGE
Personal Author(s):
RAYMOND,J L
Report Date:

Apr 1960

Media Count:

58 Page(s)

Report Number(s):

RM-2463

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0318198

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EVALUATION OF MILITARY ASSISTANCE IN UNDER-DEVELOPED COUNTRIES: A CASE STUDY OF VIETNAM

Personal Author(s):

WOLF,CHARLES JR

Report Date:

Apr 1960

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0237380

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTING TETRAETHYL-LEAD REQUIREMENTS IN THE LINEAR-PROGRAMMING FORMAT. NOTES
ON LINEAR-PROGRAMMING AND EXTENSIONS. PART 52

Personal Author(s):

DANTZIG,G B

KAWARANTANI,T T

ULLMAN,R J

Report Date:

01 Apr 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0317602

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AC+W SURVEILLANCE SCOPE CONDITION REPORT, CADF AREA

Personal Author(s):

SOLTWEDEL, E B

KATAYAMA, F Y

MAHLER, L H

Report Date:

31 Mar 1960

Media Count:

1 Page(s)

Report Number(s):

RM-2468

Contract Number:
AF 49(638)-700
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224316
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/224316.pdf
Size: 4 MB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) WEAPONS EFFECTS FOR PROTECTIVE DESIGN
Personal Author(s):
Brode, Harold L
Report Date:
31 Mar 1960
Media Count:
73 Page(s)
Report Number(s):
P-1951
XD-DOD
Monitor Series:
DOD
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
Distribution Statement:
Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational use; 31 Mar 1960. Other requests shall be referred to Department of Defense (DoD), Attn: Public Affairs Office Washington, DC 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0236090

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) WEST EUROPEAN COMMENTS ON SOVIET POSTURE AS PRESENTED IN KHRUSHCHEV'S SPEECH OF JANUARY 14, 1960

Personal Author(s):

SCHNITZER, E W

Report Date:

22 Mar 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0253585

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SURVEY OF THERMAL ACCOMMODATION COEFFICIENTS

Personal Author(s):

HARTNETT,J P

Report Date:
19 Mar 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224315
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A Network Flow Computation for Project Cost Curves,
Report Date:
18 Mar 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224314
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) DEVELOPMENT OF MAN-MACHINE SIMULATION TECHNIQUES.

Personal Author(s):

Geisler,M A

Report Date:

17 Mar 1960

Media Count:

16 Page(s)

Report Number(s):

P1945

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340565

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LOGISTICS IMPROVEMENT THROUGH PARTIAL CENTRALIZATION OF ICBM SUPPORT

Personal Author(s):

Steger,W A

Winestone,R L

Report Date:

16 Mar 1960

Media Count:

74 Page(s)

Report Number(s):

RM2330 1

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0348652

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ICBM SYSTEMS IMPROVEMENT USING STORABLE LIQUID PROPELLANTS,

Personal Author(s):

Goldsmith,M

Heffern,E C

Report Date:

15 Mar 1960

Media Count:

35 Page(s)

Report Number(s):

RM2469

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only government agencies may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0240836

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PARAMETRIC STUDY OF SURFACE-TO-AIR MISSILES VERSUS LOW-ALTITUDE TARGETS

Personal Author(s):

TATUM,F A
WEGNER,L H
Report Date:
14 Mar 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0245192
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/245192.pdf
Size: 811 KB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) SOVIET CIVIL DEFENSE
Personal Author(s):
Goure, Leon
Report Date:
14 Mar 1960
Media Count:
25 Page(s)
Report Number(s):
RAND-P-1887
XD-XD
Monitor Series:
XD
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 14 MAR 1960. Other requests shall be referred to Department of Defense, Attn: Public Affairs Office, Washington, DC 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0238095

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIMILAR SOLUTIONS OF COMPRESSIBLE LAMINAR BOUNDARY LAYER EQUATIONS FOR BINARY MIXTURES

Personal Author(s):

LI, T Y

Report Date:

09 Mar 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0317601

Full Text (pdf) Availability:

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File: /UL/317601.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE LIQUID BARRIER AS A SHIELD AGAINST RESIDUAL RADIATION

Descriptive Note:

Research memo

Personal Author(s):

BROWN, WILLIAM M

Report Date:

07 Mar 1960

Media Count:

38 Page(s)

Report Number(s):

RM-2521

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224168

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN INTRODUCTION TO INFORMATION PROCESSING LANGUAGE V,

Personal Author(s):

Newell,A

Tonge,F M

Report Date:

04 Mar 1960

Media Count:

25 Page(s)

Report Number(s):

P1929

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0236844

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON N-PERSON GAMES -VI: ON SOLUTIONS THAT EXCLUDE ONE OR MORE PLAYERS

Personal Author(s):

SHAPLEY,L S

Report Date:

03 Mar 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0316900

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) BERLIN: SOME NOTES ON A DEVELOPING CRISIS (U)
Report Date:
Mar 1960
Media Count:
56 Page(s)
Report Number(s):
RM-2563
Contract Number:
AF49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0316743
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) KHRUSHCHEV ON CURRENT SOVIET ICBM CAPABILITIES
Personal Author(s):
RUSH,M
Report Date:
Mar 1960
Media Count:
43 Page(s)
Report Number(s):
RM-2555
Contract Number:
AF49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341380

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COST IMPLICATIONS OF SOME PROPOSED EMERGENCY COMMUNICATIONS SYSTEMS

Personal Author(s):

Hill,L S

Report Date:

01 Mar 1960

Media Count:

58 Page(s)

Report Number(s):

RM2435

Contract Number:

AF49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only government agencies may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244699

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET COMPUTER TECHNOLOGY

Personal Author(s):

WARE,W H

Report Date:

01 Mar 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340563

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SIERRA NEAR EAST WAR GAMES. SUMMARY

Personal Author(s):

Quade,E S

Report Date:

Mar 1960

Media Count:

49 Page(s)

Report Number(s):

R354

Contract Number:

AF 49(638)-700

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0237789

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DATA FOR TESTING A MODEL OF ORGANIZATIONAL BEHAVIOR

Personal Author(s):

Chapman,R L

Report Date:

01 Mar 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB190248

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Economics of Defense in the Nuclear Age,

Personal Author(s):

Hitch, Charles J

McKean, Roland N

Report Date:

Mar 1960

Media Count:

437 Page(s)

Report Number(s):

R-346

X0-XD

Monitor Series:

XD

Report Classification:

Unclassified

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12 - U.S. GOVT. AND THEIR CONTRACTORS

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0236075

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SABATIER REACTION FOR INORGANIC RECOVERY OF OXYGEN IN MANNED SPACE CAPSULES

Personal Author(s):

DOLE,S H

TAMPLIN,A R

Report Date:

25 Feb 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0237091

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/237091.pdf

Size: 4 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Missile Prelaunch Confidence Checkout: Content and Equipment Design Criteria

Personal Author(s):

Firstman, S I

Voosen, B J

Report Date:

22 Feb 1960

Media Count:

110 Page(s)

Report Number(s):

RAND-RM-2485

XC-USAF

Contract Number:

AF 49(368)-700

Monitor Series:

USAF

Report Classification:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0232871

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOVIET STRATEGIC IDEAS, JANUARY 1960
Personal Author(s):
DINERSTEIN,H S
Report Date:
19 Feb 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224167
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Psychological Inspection,
Report Date:
19 Feb 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0232872

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SIGNIFICANCE OF CHINESE COMMUNIST TREATMENT OF KHRUSHCHEV'S JANUARY 14 SPEECH
ON STRATEGY

Personal Author(s):

HSIEH,A L

Report Date:

19 Feb 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224310

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Comparisons of United States and Ussr National Output: Some Rules of the Game,

Report Date:

15 Feb 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0235965

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CONTROL OF INDUSTRIAL LABOR IN THE SOVIET UNION

Personal Author(s):

GLIKSMAN,JERZY G

Report Date:

15 Feb 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0233112

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROPULSION REQUIREMENTS FOR RENDEZVOUS IN ORBIT

Personal Author(s):

LEVIN,E

Report Date:

11 Feb 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224313

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNIST ECONOMIC SUBVERSION -- A REAPPRAISAL.

Personal Author(s):

Heymann,Hans , Jr

Report Date:

09 Feb 1960

Media Count:

18 Page(s)

Report Number(s):

P-1943

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0342531

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME OPERATIONAL AND WEAPON-EMPLOYMENT ASPECTS OF A HYPOTHETICAL NUCLEAR LIMITED WAR

Descriptive Note:

Research memo.

Personal Author(s):

Ellis, J W
Greene, T E
Report Date:
05 Feb 1960
Media Count:
66 Page(s)
Report Number(s):
RAND/RM-2565
XC-DCSRTAF-DDP
Contract Number:
AF 49(638)-700
Monitor Series:
DCSRTAF-DDP
Report Classification:
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02 - U.S. GOVT. AND THEIR CONTRACTORS
51 - RESTRICTED DATA
Distribution Statement:
Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use;
FEB 1960. Other requests shall be referred to Deputy Chief of Staff Research and Technology (Air Force),
Directorate of Development Planning, Attn: RAND Project Office, Washington, DC. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0311393
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) BILATERAL NUCLEAR LIMITED WAR: AN ANALYSIS OF ITS CONDITIONS AND PROBLEMS,
Personal Author(s):
DeWeerd, H A
Ellis, J W , Jr
George, A L
Greene, T E
Sallagar, F M
Report Date:

05 Feb 1960
Media Count:
122 Page(s)
Report Number(s):
RM-2546
Contract Number:
AF 49(638)-700
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0317394
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) EQUIPMENT SIGNATURES. DETECTION AND IDENTIFICATION OF ELECTRICAL DEVICES BY RADIATION
CHARACTERISTICS
Personal Author(s):
MYERS, H A
Report Date:
05 Feb 1960
Media Count:
56 Page(s)
Report Number(s):
RM-2466
Contract Number:
AF 49(638)-700
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224311

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC DEVELOPMENT AND THE EMPLOYMENT OF RESOURCES.

Personal Author(s):

Moore,Frederick T

Report Date:

05 Feb 1960

Media Count:

41 Page(s)

Report Number(s):

P-1904

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311392

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DEVELOPMENT OF A HYPOTHETICAL NUCLEAR LIMITED WAR

Descriptive Note:

Research memo.

Personal Author(s):

DeWeerd, H A

Ellis, Jr , J W

George, A L

Goure, L

Greene, T E

Report Date:

05 Feb 1960

Media Count:

108 Page(s)

Report Number(s):

RAND/RM-2545

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff Research and Development (Air Force), Directorate of Development Planning, Attn: Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0616598

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CRYOGENIC GYROS,

Personal Author(s):

Culver,W H

Davis,M H

Report Date:

05 Feb 1960

Media Count:

10 Page(s)

Report Number(s):

P-1967

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244725

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET RESEARCH IN MACHINE TRANSLATION

Personal Author(s):

HARPER,K E

Report Date:

04 Feb 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0317369

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF IRBM TRAJECTORY PREDICTION FROM ANGLE-ONLY MEASUREMENTS

Personal Author(s):

LAZARUS,A J

Report Date:

Feb 1960
Media Count:
29 Page(s)
Report Number(s):
RM-2339
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0317222
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) COMMUNIST CHINA AND NUCLEAR WARFARE
Personal Author(s):
HSIEH,ALICE LANGLEY
Report Date:
Feb 1960
Media Count:
1 Page(s)
Report Classification:
SECRET
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0316460

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME CONSIDERATIONS ABOUT HARDENING OF UNDERGROUND CABLES (U)

Personal Author(s):

LAUPA,ARMAS

Report Date:

Feb 1960

Media Count:

31 Page(s)

Report Number(s):

RM-2503

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0316155

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NORTHERN-AREA WARNING COMMUNICATIONS

Personal Author(s):

BEDROSIAN, EDWARD

Report Date:

01 Feb 1960

Media Count:

74 Page(s)

Report Number(s):

RM-2307

Contract Number:

AF 49(638)-700

Report Classification:
CONFIDENTIAL
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09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0317734
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) DEBRIS ON THE RUNWAY--A STUDY OF THE DISPLACEMENT OF DEBRIS BY A NUCLEAR BLAST WAVE
Personal Author(s):
BROWN,WILLIAM M
Report Date:
Feb 1960
Media Count:
25 Page(s)
Report Number(s):
RM-2509
Contract Number:
AF 49(638)-700
Report Classification:
Unclassified
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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0236439
Corporate Author:
RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) ON THE EPISTEMOLOGY OF THE INEXACT SCIENCES
Personal Author(s):
HELMER,OLAF
RESCHER,NICHOLAS
Report Date:
Feb 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
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Technical Reports Collection

Citation Format: FOIA(UL)

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Accession Number:
AD0244717
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ATMOSPHERIC EXTINCTION OF INFRA-RED RADIATION
Personal Author(s):
DEIRMENDJIAN,D
Report Date:
29 Jan 1960
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY
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Citation Format: FOIA(UL)

Accession Number:

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Full Text (pdf) Availability:

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File: /UL/233111.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) POWERPLANTS FOR ATMOSPHERIC AND SURFACE VEHICLES ON MARS

Personal Author(s):

Krase, W H

Report Date:

25 Jan 1960

Media Count:

29 Page(s)

Report Number(s):

RAND/P-1891

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0245191

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NATURE AND FEASIBILITY OF WAR AND DETERRENCE

Personal Author(s):

KAHN,HERMAN

Report Date:

20 Jan 1960

Media Count:

46 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244947

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ATMOSPHERIC ENTRY OF MANNED VEHICLES

Personal Author(s):

GAZLEY,CARL JR

Report Date:

20 Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0233143

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON ONE-DIMENSIONAL NEUTRON MULTIPLICATION

Personal Author(s):

HARRIS,T E

Report Date:

18 Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224164

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Comments on Some Aspects of Corporate Planning in the Defense Industry,

Report Date:

18 Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0358251

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FURTHER ESTIMATES OF U. S. CITY DESTRUCTION IN THE EVENT OF NUCLEAR ATTACKS

Personal Author(s):

Lavin,M M

Report Date:

15 Jan 1960

Media Count:

35 Page(s)

Report Number(s):

RM-2504

Contract Number:

AF 49(638)-700

Report Classification:

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Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0237092

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SEARCH RULES FOR AUTOMATIC FAULT LOCATION

Personal Author(s):

FIRSTMAN,SIDNEY I

GLUSS,BRIAN

Report Date:

15 Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

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Citation Format: FOIA(UL)

Accession Number:

AD0241297

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A STOCHASTIC FORCE SURVIVAL MODEL

Personal Author(s):

TRINKL,F H

CARR,C R

Report Date:

14 Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0237379

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PARAMETRIC STUDY OF THE PERFORMANCE OF AIR-LAUNCHED BALLISTIC MISSILES

Personal Author(s):

SMITH,G K

Report Date:

14 Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340000

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DESIGN STUDY OF A FAMILY OF NUCLEAR-POWERED SUBSONIC AIRPLANES

Descriptive Note:

Research memo.

Personal Author(s):

Kirkwood, T F

Krase, W H

Report Date:

13 Jan 1960

Media Count:

71 Page(s)

Report Number(s):

RAND-RM-2383

XC-AFRDC

Contract Number:

AF 49(638)-700

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0240303

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PRELIMINARY-DESIGN AID FOR STUDYING COMPONENT WEIGHT ASSIGNMENTS IN BALLISTIC MISSILE PAYLOADS

Personal Author(s):

FIRSTMAN,SIDNEY I

Report Date:

13 Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0235811

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE EQUIVALENCE OF THE CAPACITY-CONSTRAINED TRANSSHIPMENT PROBLEM AND THE HITCHCOCK PROBLEM. NOTES ON LINEAR PROGRAMMING AND EXTENSIONS. PART 53

Personal Author(s):

FULKERSON,D R

Report Date:

13 Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0235145

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) USE OF TOLERANCE LIMITS IN MISSILE RELIABILITY ANALYSIS

Personal Author(s):

MADANSKY,ALBERT

Report Date:

13 Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0616504

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ACCURACY OF WINDS DERIVED BY THE RADAR TRACKING OF CHAFF AT HIGH ALTITUDES,

Personal Author(s):

Rapp,R R

Report Date:

07 Jan 1960

Media Count:

25 Page(s)

Report Number(s):

P-1879-NSF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224308

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Use of Reliability Estimates in the Design of Missile Prelaunch Checkout Equipment,

Report Date:

05 Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0236440

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MEASUREMENT OF MISSILE RELIABILITY IN PRE-LAUNCH OPERATING ENVIRONMENTS

Personal Author(s):

STOLLER,DAVID S

Report Date:

01 Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0315738

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SUMMARY OF THE PERTURBING EFFECTS OF SOLAR RADIATION PRESSURE ON EARTH SATELLITES

Personal Author(s):

LEVIN,E

Report Date:

01 Jan 1960

Media Count:

47 Page(s)

Report Number(s):

RM-2477

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0317370

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ' 'PROFIT' ': MAXIMIZING RANGE BY THE BEST CHOICE OF GEOGRAPHICAL LOCATIONS FOR AIR
REFUELINGS. PART I. MECHANICAL ANALOGUE SOLUTION

Personal Author(s):

WECHSLER,J W

Report Date:

Jan 1960

Media Count:

51 Page(s)

Report Number(s):

RM-2526

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0250236

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ADAPTIVE CHARACTER READER

Personal Author(s):

BARAN,PAUL

ESTRIN,GERALD

Report Date:

Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0233753

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RAND SYMPOSIUM ON MATHEMATICAL PROGRAMMING. LINEAR PROGRAMMING3

Report Date:

Jan 1960

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224165
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Power - The Idea and Its Communication,
Report Date:
31 Dec 1959
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0234628
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE TERMS OF SOVIET-SATELLITE TRADE. A BROADENED ANALYSIS
Descriptive Note:
Research memo.
Personal Author(s):
MENDERSHAUSEN,HORST
Report Date:
29 Dec 1959

Media Count:

49 Page(s)

Report Number(s):

RM-2507

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0234652

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NUCLEAR WEAPONS AND LIMITED WAR

Personal Author(s):

SCHELLING,T C

Report Date:

29 Dec 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224309

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC WELFARE AND THE ALLOCATION OF RESOURCES FOR INVENTION.

Personal Author(s):

Arrow, Kenneth J

Report Date:

15 Dec 1959

Media Count:

23 Page(s)

Report Number(s):

P-1856RC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0235350

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GENERAL EQUATIONS OF MOTION OF A SATELLITE IN A GRAVITATIONAL GRADIENT FIELD

Descriptive Note:

Research memo.

Personal Author(s):

Frick, R H

Garber, T B

Report Date:

09 Dec 1959

Media Count:

49 Page(s)

Report Number(s):

RM-2527

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0231066

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN MACHINE TRANSLATION--4: MANUAL FOR PRE-EDITING RUSSIAN SCIENTIFIC TEXT

Personal Author(s):

EDMUNDSON,H P

HAYS,D G

Report Date:

04 Dec 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0259231

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN MACHINE TRANSLATION--4: MANUAL FOR PRE-EDITING RUSSIAN SCIENTIFIC TEXT

Personal Author(s):

HAYS,D G
RENNER,E K
MOHR,D V
Report Date:
04 Dec 1959
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224303
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Soviet Foreign Aid as a Problem for U.S. Policy,
Report Date:
01 Dec 1959
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0315865
Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SURPRISE ATTACK IN SOVIET MILITARY THOUGHT SINCE THE 1955 DOCTRINAL REVISION

Personal Author(s):

HORELICK,ARNOLD L

Report Date:

Dec 1959

Media Count:

1 Page(s)

Report Number(s):

RM-2496

Contract Number:

AF49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0316084

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETERRENCE, DISARMAMENT, AND WAR (U)

Personal Author(s):

SCHELLING,T C

Report Date:

Dec 1959

Media Count:

34 Page(s)

Report Number(s):

S-130

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224284

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Competition and Complementarity between Defense and Development - A Preliminary Approach,

Report Date:

01 Dec 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224065

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Technology and the Challenge of the Future.

Report Date:

30 Nov 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0237785
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A GAME SOLUTION TO A MISSILE LAUNCHING SCHEDULING PROBLEM
Personal Author(s):
JOHNSON,S M
Report Date:
25 Nov 1959
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0234961
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) IMPACT WAVE PROPAGATION IN COLUMNS OF SAND
Personal Author(s):
PARKIN,B R
Report Date:
19 Nov 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0232873

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE COMPUTATIONAL SOLUTION OF DYNAMIC-PROCESSES. XIV6 MISSILE-ALLOCATION PROBLEMS

Personal Author(s):

BELLMAN,R E

DREYFUS,S E

Report Date:

13 Nov 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0234041

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ECONOMICS OF PARALLEL R AND D EFFORTS. A SEQUENTIAL-DECISION ANALYSIS

Descriptive Note:

Research memo.

Personal Author(s):

NELSON,R R

Report Date:

12 Nov 1959

Media Count:

40 Page(s)

Report Number(s):

RM-2482

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224152

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DO HIGH PRICES FOR FUTURE WEAPONS MEAN NATIONAL BANKRUPTCY.

Personal Author(s):

Novick ,David

Fisher,G H

Report Date:

12 Nov 1959

Media Count:

10 Page(s)

Report Number(s):

P1715

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0233261

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DESIGN OF COMPLEX MANAGEMENT-CONTROL SYSTEMS

Personal Author(s):

POSTLEY,J A

Report Date:

11 Nov 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0350230

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RESOURCE ALLOCATIONS AND FUTURE WEAPON SYSTEMS

Personal Author(s):

Novick,David

Report Date:

05 Nov 1959

Media Count:

29 Page(s)

Report Number(s):

RM2478

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224161

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Simple Mathematics of Maximization,

Report Date:

03 Nov 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0229912

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON MOTIVES FOR 'DISARMAMENT' RESEARCH

Descriptive Note:

Research memo.,

Personal Author(s):

BOHN, LEWIS C

Report Date:

30 Oct 1959

Media Count:

25 Page(s)

Report Number(s):

RM-2472

Contract Number:

AF

33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224305

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Peak Loads and Efficient Pricing: A General Solutions and a Practical Approach,

Report Date:

28 Oct 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224162

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Infrared Detection by Ideal Lasers and Narrow Band Counters,

Report Date:

26 Oct 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0232874

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANGULAR ACCURACY OF A PHASED ARRAY RADAR

Personal Author(s):

BRENNAN, L E

Report Date:

22 Oct 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340424

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MIGHTYMAN ICBM

Personal Author(s):

Goldsmith,Martin

Report Date:

21 Oct 1959

Media Count:

16 Page(s)

Report Number(s):

B155

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224160

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/224160.pdf

Size: 917 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PREDICTABILITY OF THE COSTS, TIME, AND SUCCESS OF DEVELOPMENT

Personal Author(s):

Marshall, A W

Meckling, W H

Report Date:

14 Oct 1959

Media Count:

27 Page(s)

Report Number(s):

P-1821

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224159

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) An Information Processing Theory of Verbal Learning,

Report Date:

09 Oct 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0315088

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNIST CHINA AND THE KOREAN WAR: THE DECISION TO INTERVENE (U)

Personal Author(s):

WHITING,A S

Report Date:

Oct 1959

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0317100

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POTENTIAL CAPABILITIES OF CHEMICALLY FUELED, LONG ENDURANCE AIRCRAFT

Personal Author(s):

SKAVDAHL,H

Report Date:

Oct 1959

Media Count:

14 Page(s)

Report Number(s):

S-127

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0231787

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET BLOC-LATIN AMERICAN ECONOMIC RELATIONS AND UNITED STATES POLICY

Descriptive Note:

Research memo.

Personal Author(s):

HIRSCHMAN, A O

Report Date:

28 Sep 1959

Media Count:

44 Page(s)

Contract Number:

AF

33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0232507

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MISSLOGS: A GAME OF MISSILE LOGISTICS

Personal Author(s):

VOOSEN,B J

CORONA,DOLORES

Report Date:

28 Sep 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0235823

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MODEL FOR ASSESSING THE EFFECT OF MAINTENANCE ON MISSILE LAUNCH PROBABILITY

Personal Author(s):

BEAN,ELOISE E

MCGLOTHLIN,W H

Report Date:

23 Sep 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0369057

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DOCTRINE AND TACTICS OF REVOLUTIONARY WARFARE: THE VIET MINH IN INDOCHINA.

Descriptive Note:

Research memo.,

Personal Author(s):

Tanham,G K

Report Date:

20 Sep 1959

Media Count:

211 Page(s)

Report Number(s):

RM-2395

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224157

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USE OF SIMULATION IN LOGISTICS POLICY RESEARCH,

Personal Author(s):

Haythorn,W W

Report Date:

10 Sep 1959

Media Count:

43 Page(s)

Report Number(s):

P1791

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224158

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Simulation Techniques,

Report Date:

04 Sep 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224156

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Support of Future Weapons,

Report Date:

03 Sep 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339817

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THEORETICAL DESCRIPTION OF THE BLAST AND FIREBALL FOR A SEA LEVEL MEGATON EXPLOSION

Descriptive Note:

Research memorandum

Personal Author(s):

Brode, H L

Report Date:

02 Sep 1959

Media Count:

147 Page(s)

Report Number(s):

RM-2248

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

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02 - U.S. GOVT. AND THEIR CONTRACTORS

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0225973

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) KHRUSHCHEV: HIS POLITICAL CHARACTER AND STRATEGIC VIEWS

Descriptive Note:

Research memo.,

Personal Author(s):

RUSH,MYRON

Report Date:

02 Sep 1959

Media Count:

29 Page(s)

Report Number(s):

RM-2441

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0315333

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHICH INDUSTRIES WOULD BE MOST IMPORTANT IN A POSTWAR U.S. ECONOMY (U)

Personal Author(s):

BEAR,D V T

CLARK,P G

Report Date:

Sep 1959

Media Count:

100 Page(s)

Report Number(s):

RM-2443

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0315499

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A DISCUSSION OF GUIDANCE TECHNIQUES AND COUNTER-MEASURES AS APPLIED TO LOCAL
DEFENSE WEAPONS (U)

Personal Author(s):

MALLETT, J D

Report Date:

Sep 1959

Media Count:

57 Page(s)

Report Number(s):

S-122

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0315219

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AC + W SURVEILLANCE SCOPE CONDITION REPORT, EADF AREA

Personal Author(s):

SOLTWEDEL, E B

KATAYAMA, F Y

Report Date:

Sep 1959

Media Count:

189 Page(s)

Report Number(s):

RM-2448

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0231763

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PARAMETRIC STUDY OF CERTAIN LOW-MOLECULAR-WEIGHT COMPOUNDS AS NUCLEAR ROCKET PROPELLANTS. IV. LITHIUM HYDRIDE

Personal Author(s):

KRIEGER,F J

Report Date:

29 Aug 1959

Media Count:

36 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224155

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ECONOMICS OF PARALLEL R AND D EFFORTS.

Personal Author(s):

Nelson, Richard R
Report Date:
24 Aug 1959
Media Count:
29 Page(s)
Report Number(s):
P-1774
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0338920
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) Fireball Effects for AICBM
Descriptive Note:
Research memo.
Personal Author(s):
Karzas, W J
Latter, A L
Report Date:
24 Aug 1959
Media Count:
32 Page(s)
Report Number(s):
RM-2258
XC-AFRDC
Monitor Series:
AFRDC
Report Classification:
SECRET
Distribution Limitation(s):
09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Office of the Deputy Chief of Staff for Research and Development,
Department of the Air Force, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224304

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NATIONAL SECURITY POLICY AS A FIELD FOR ECONOMICS RESEARCH,

Personal Author(s):

Hitch,Charles

Report Date:

19 Aug 1959

Media Count:

30 Page(s)

Report Number(s):

P1776

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0225227

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) KRUSHCEV'S MAJOR INFORMAL INTERVIEWS WITH NON-BLOC LEADERS, JANUARY 1, 1957-AUGUST
1, 1959: A SELECTED BIBLIOGRAPHY AND CHRONOLOGY

Personal Author(s):

JONAS,ANNE M

Report Date:

18 Aug 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0221676

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) An Introduction to War Games.

Personal Author(s):

Weiner,M G

Report Date:

17 Aug 1959

Media Count:

40 Page(s)

Report Number(s):

P-1773

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: No Foreign.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0229374

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF PRODUCERS' DURABLES IN THE UNITED STATES AND THE USSR IN 1955

Descriptive Note:

Research memo.

Personal Author(s):

BECKER, ABRAHAM S

Report Date:

15 Aug 1959

Media Count:

1 Page(s)

Report Number(s):

RM-2432

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311470

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE VULNERABILITY OF THE SOVIET URBAN POPULATION TO NUCLEAR WEAPONS: AN APPLICATION OF THE MUSTARD MODEL

Descriptive Note:

Research memo.

Personal Author(s):

Lavin, Marvin M

Report Date:

01 Aug 1959

Media Count:

49 Page(s)

Report Number(s):

RAND/RM-2434

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Controlling DoD Organization: Hqs. USAF, Directorate of Development Planning, Attn: AFRDP/Project
Rand Office, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0246433

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PARAMETRIC STUDY OF CERTAIN LOW-MOLECULAR-WEIGHT COMPOUNDS AS NUCLEAR ROCKET
PROPELLANTS. II. AMMONIA

Personal Author(s):

KRIEGER,F J

Report Date:

31 Jul 1959

Media Count:

39 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0231762

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A PARAMETRIC STUDY OF CERTAIN LOW-MOLECULAR-WEIGHT COMPOUNDS AS NUCLEAR ROCKET PROPELLANTS. III. WATER

Personal Author(s):

KRIEGER, F J

Report Date:

31 Jul 1959

Media Count:

36 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: NO FORN. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224282

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Spade, A Set of Subroutines for Solving Elliptic and Parabolic Partial Differential Equations,

Report Date:

29 Jul 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0222665

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A MANUAL FOR WEAPON SYSTEM ANALYSTS: FATALITIES IN A SINGLE IDEALIZED URBAN AREA (U)

Personal Author(s):

LAVIN, M M

Report Date:

22 Jul 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224784

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EMPIRICAL ANALYSIS - POWER SERIES.

Personal Author(s):

Germond,H H

Report Date:

21 Jul 1959

Media Count:

8 Page(s)

Report Number(s):

RM-194

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0231548

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE BASE REPAIR CYCLE FOR THE F-102 FIRE CONTROL SYSTEM

Personal Author(s):

WEIFENBACH,ANNETTE

Report Date:

21 Jul 1959

Media Count:

67 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224302

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Linearized Theory of Cavity Flow in Two-Dimensions,

Report Date:

15 Jul 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224154

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Seven Fallacies about Central Africa,

Report Date:

13 Jul 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0234505

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WAR GAMING METHODOLOGY

Personal Author(s):

WEINER,M G

Report Date:

10 Jul 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0227309

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE VULNERABILITY OF HYPOTHETICAL RAIL TRANSPORT FOR A MOBILE BALLISTIC MISSILE SYSTEM

Descriptive Note:

Research memo.,

Personal Author(s):

ELSWICK,W R

Report Date:

09 Jul 1959

Media Count:

17 Page(s)

Report Number(s):

RM-2410

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0226411
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) NOTE ON THE STRONTIUM-90 FALLOUT
Descriptive Note:
Research memo.,
Personal Author(s):
LATTER,A L
PLESSET,M S
Report Date:
07 Jul 1959
Media Count:
4 Page(s)
Report Number(s):
RM-2409
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224153
Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Variety of Intelligent Learning in a General Problem Solver,

Report Date:

06 Jul 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0315105

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COST IMPLICATIONS OF VARIATIONS IN THE CHARACTERISTICS OF EARLY WARNING SATELLITE
SYSTEMS

Personal Author(s):

LARGE,J P

Report Date:

Jul 1959

Media Count:

47 Page(s)

Report Number(s):

RM-2420

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0314456

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DUAL-MODE SYSTEM FOR BALLISTIC MISSILE GUIDANCE

Personal Author(s):

GARBER,T B

Report Date:

Jul 1959

Media Count:

50 Page(s)

Report Number(s):

RM-2449

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0218932

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Supplementary Notes on the German Crisis: May-June 1959,

Personal Author(s):

Davison, W P

Report Date:

01 Jul 1959

Media Count:

1 Page(s)

Contract Number:

AF

33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

22 - DOCUMENT ILLEGIBLE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Reference only; can be viewed at DTIC only. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0312454

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SELECTED LIST OF ENGINEERING DIVISION PUBLICATIONS

Descriptive Note:

Research memo.

Report Date:

01 Jul 1959

Media Count:

1 Page(s)

Report Number(s):

RM-1921-1

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0225020

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) POLITICAL OPINION IN THE SOVIET-OCCUPIED ZONE OF GERMANY

Personal Author(s):

HURWITZ, HAROLD

CRANE, SIBYLLE

DAVISON, W P

Report Date:

01 Jul 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0231761

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PARAMETRIC STUDY OF CERTAIN LOW-MOLECULAR-WEIGHT COMPOUNDS AS NUCLEAR ROCKET PROPELLANTS, I. HYDROGEN

Personal Author(s):

KRIEGER, F J

Report Date:

30 Jun 1959

Media Count:

36 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0225229

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ALLOCATION OF TWO TYPES OF AIRCRAFT IN TACTICAL AIR WAR: A GAME-THEORETIC ANALYSIS

Personal Author(s):

BERKOVITZ,L D

DRESHER,MELVIN

Report Date:

30 Jun 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0228783

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON CONTROL OF REACTOR SHUTDOWN INVOLVING MINIMAL XENON POISONING

Descriptive Note:

Research memo.,

Personal Author(s):

ASH,MILTON

BELLMAN,RICHARD

KALABA,ROBERT

Report Date:

26 Jun 1959

Media Count:

15 Page(s)

Report Number(s):

RM-2396

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244724

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF WATER PARTICLES IN THE ATMOSPHERIC TRANSMISSION OF INFRA-RED RADIATION

Personal Author(s):

DEIRMENDJIAN,D

Report Date:

25 Jun 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS
20 - JOURNAL ARTICLES; DTIC USERS ONLY

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339880

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) YIELDS, CEP'S AND SUPER-HARDNESS

Descriptive Note:

Research memo.

Personal Author(s):

Brode, H L

Garber, T B

Oyster, D E

Report Date:

23 Jun 1959

Media Count:

20 Page(s)

Report Number(s):

S-118

XC-USAF

Monitor Series:

USAF

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339961

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SHIELDING THE ICBM AGAINST X-RAY EFFECTS

Descriptive Note:

Research memo.

Personal Author(s):

Latter, A L

Martinelli, E A

Whitener, J E

Report Date:

19 Jun 1959

Media Count:

14 Page(s)

Report Number(s):

RAND/RM-2394

XC-USAF

Monitor Series:

USAF

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

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Dept. of the Air Force, Attn: Public Affairs Office, Washington, DC.,

Technical Reports Collection

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AD0315104

Full Text (pdf) Availability:

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File: /UL/315104.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LONG TERM FALLOUT CONTAMINATION FROM SURFACE BURST NUCLEAR WEAPONS (U)

Descriptive Note:

Research memo.

Personal Author(s):

HILL, JERALD E

Report Date:

17 Jun 1959

Media Count:

45 Page(s)

Report Number(s):

RM-2393

XC-USAF

Contract Number:

AF 33(038)-6413

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USAF

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational use; 17 Jun 1959. Other requests shall be referred to Department of the Air Force, Washington DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338841

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Aurora from the Teak Shot

Descriptive Note:

Research memo.

Personal Author(s):

Latter, A L

McMillan, W G

Report Date:

17 Jun 1959

Media Count:

26 Page(s)

Report Number(s):

RM-2392

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224283

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Experimental Design, Test, and Evaluation of an F-100D Flyaway Kit,

Report Date:

16 Jun 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0220064

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FIRST-ORDER ERROR PROPAGATION IN A STAGE-WISE SMOOTHING PROCEDURE FOR SATELLITE
OBSERVATIONS

Personal Author(s):

SWERLING,PETER

Report Date:

15 Jun 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0313906

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SAFE RADII AND ORIENTATIONS FOR SEVERAL TACTICAL AIRCRAFT AND NUCLEAR WEAPON YIELD
COMBINATIONS

Descriptive Note:

Research memo.,
Personal Author(s):
ELSWICK,W R
Report Date:
08 Jun 1959
Media Count:
1 Page(s)
Report Number(s):
RM-2389
Contract Number:
AF 33(038)-6413
Report Classification:
SECRET
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0452992
Full Text (pdf) Availability:
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File: /UL/452992.pdf
Size: 2 MB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) SAC UTILIZATION OF U.S. ZI CIVIL AIRFIELDS: B-47 OPERATIONS AND COST
Descriptive Note:
Research memo.
Personal Author(s):
Sturdevant, C R
Report Date:
08 Jun 1959
Media Count:
74 Page(s)
Report Number(s):
RAND-RM-2363

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

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Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224151

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Sino-Soviet Alliance: How Durable,

Report Date:

05 Jun 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0225224

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SIMPLEX METHOD FOR QUADRATIC PROGRAMMING: NOTES ON LINEAR PROGRAMMING AND
EXTENSIONS-PART 51

Personal Author(s):

WOLFE,PHILIP

Report Date:

05 Jun 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224149

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) United Nations, Department of Economic Affairs. The Development of Manufacturing Industry in
Egypt, Israel and Turkey,

Report Date:

04 Jun 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB189287

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Meteors: Frequency, Size and Depth of Penetration,

Personal Author(s):

Kallmann, H K

Report Date:

03 Jun 1959

Media Count:

16 Page(s)

Report Number(s):

X0-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0313430

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIGNAL DENSITY STUDY--II. ZONE OF INTERIOR. MAPS FOR RAND REPORT R-319

Report Date:

Jun 1959

Media Count:

5 Page(s)

Report Number(s):

R-319-Add

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224146

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IS DEFENSE SPENDING WASTEFUL.

Personal Author(s):

Rowen,H S

Report Date:

01 Jun 1959

Media Count:

7 Page(s)

Report Number(s):

P-1660

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0342530

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LOW-YIELD FUSION WEAPONS FOR LIMITED WARS

Personal Author(s):

Cohen, S T

Report Date:

01 Jun 1959

Media Count:

24 Page(s)

Report Number(s):

RAND/R-347

XC-AFRDC

Contract Number:

AF 18(600)-1600

Monitor Series:

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Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; 01 JUN 1959. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: RAND Project Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0313429

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SIGNAL DENSITY STUDY--II. ZONE OF INTERIOR

Personal Author(s):

HIEBERT, A L

LUSTGARTEN, M N

Report Date:

Jun 1959

Media Count:

1 Page(s)

Report Number(s):

R-319

Contract Number:

AF

33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0270835

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/270835.pdf

Size: 12 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AERODYNAMICS OF THE UPPER ATMOSPHERE

Personal Author(s):

MASSON, DAVID J

Report Date:

Jun 1959

Media Count:

489 Page(s)

Report Number(s):

RAND-R-339

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUN 1959. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0312687

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN APPLICATION OF RADAR ABSORBING MATERIALS TO WEAPON SYSTEM DESIGN

Personal Author(s):

RAYMOND, J L

Report Date:

27 May 1959

Media Count:

18 Page(s)

Report Number(s):

S-119

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0219781

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SURVEY OF ENERGY AND OIL DEMAND PROJECTIONS FOR WESTERN EUROPE

Personal Author(s):

LUBELL,HAROLD

Report Date:

21 May 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0214636

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Selected List of Unclassified Publications of the Social Science Division, The Rand Cooperation 1948-1959.

Descriptive Note:

Research memo.,

Report Date:

15 May 1959

Media Count:

32 Page(s)

Report Number(s):

RM-1403-4

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224940

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/224940.pdf

Size: 797 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN ANALYTICAL MODEL FOR DEVELOPING OPTIMAL BALLISTIC MISSILE MAINTENANCE PROCEDURES

Personal Author(s):

Bean, E E

Report Date:

13 May 1959

Media Count:

26 Page(s)

Report Number(s):

P-1696

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 13 MAY 1959. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224285

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Support Resources,

Report Date:

10 May 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADC005706

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Aftermath of a Single Nuclear Detonation by Accident or Sabotage: Some Problems Affecting U. S. Policy, Military Reactions, and Public Information.

Descriptive Note:

Research memo.,

Personal Author(s):

Ikle ,Fred Charles

Hill,J E

Report Date:

08 May 1959

Media Count:

158 Page(s)

Report Number(s):

RM-2364

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

51 - RESTRICTED DATA

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0315103

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYSTEM DEMAND FOR AIRFRAME PARTS DURING WEAPON-SYSTEM PHASE-IN

Personal Author(s):

GOLDMAN,T A

Report Date:

May 1959

Media Count:

59 Page(s)

Report Number(s):

RM-2381

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0309376
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) TRAJECTORIES FOR A POSSIBLE SOVIET VENUS SHOT
Personal Author(s):
ROWELL,L N
Report Date:
May 1959
Media Count:
32 Page(s)
Report Number(s):
RM-2376
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0311420
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) SOVIET STRATEGIC THINKING, FEBRUARY 1958
Descriptive Note:
Research memo.
Personal Author(s):
Dinerstein, H S
Report Date:
01 May 1959
Media Count:
13 Page(s)
Report Number(s):

RAND/RM-2219-1

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; MAY 1959. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of Staff Research and Development (USAF), AFRDP, Attn: Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341377

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE DETERRENCE AND STRATEGY OF TOTAL WAR, 1959-1961: A METHOD ANALYSIS

Descriptive Note:

Research memorandum

Personal Author(s):

Goldhamer, Herbert

Marshall, Andrew W

Leites, Nathan

Report Date:

30 Apr 1959

Media Count:

212 Page(s)

Report Number(s):

RAND-RM-2301

XC-USAF

Monitor Series:

USAF

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

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Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 30 Apr 1959. Other requests shall be referred to the Department of the Air Force, Attn: Rand Project Office, Washington, DC 20330., Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224056

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/224056.pdf

Size: 947 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Use of Tolerance Limits in Missile Evaluation

Personal Author(s):

Madansky, Albert

Report Date:

20 Apr 1959

Media Count:

17 Page(s)

Report Number(s):

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Other requests shall be referred to DTIC-BRR, 8725 John J. Kingman Rd. Ste 0944, Ft. Belvoir, VA 22060-6218

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0306791

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PRELIMINARY EXAMINATION OF SINGLE-SIDE-BAND COMMUNICATIONS

Personal Author(s):

SQUIRES,W K

Report Date:

20 Apr 1959

Media Count:

63 Page(s)

Report Number(s):

RM-2057-1

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224144

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE APPLICATION OF RANDOM SAMPLING SIMULATION TO RELIABILITY ESTIMATING,

Personal Author(s):

Firstman,Sidney I

Report Date:
16 Apr 1959
Media Count:
25 Page(s)
Report Number(s):
P1638
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224148
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Space Flight for Man,
Report Date:
15 Apr 1959
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0314563
Corporate Author:
RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) POST-DETECTION INTEGRATION AND RADAR RESOLUTION
Personal Author(s):
BAILEY,H H
Report Date:
14 Apr 1959
Media Count:
48 Page(s)
Report Number(s):
RM-2370
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0339166
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE PANCAKE SHOT
Descriptive Note:
Research memo.,
Personal Author(s):
Latter,A L
LeLevier,R E
Report Date:
13 Apr 1959
Media Count:
15 Page(s)
Report Number(s):
RM-2361
Report Classification:
SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0313631

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MILITARY ASSISTANCE POLICY IN AN UNDERDEVELOPED COUNTRY: IRAN

Descriptive Note:

Research memo.,

Personal Author(s):

CLARK,PAUL G

Report Date:

08 Apr 1959

Media Count:

55 Page(s)

Report Number(s):

RM-2416

Contract Number:

AF 33(038)-6413

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0261650
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) LINES OF FORCE OF THE GEOMAGNETIC FIELD IN SPACE
Personal Author(s):
VESTINE,E H
SIBLEY,W L
Report Date:
07 Apr 1959
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0344369
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) LABORATORY EXAMINATION OF DECENTRALIZED ICBM SQUADRON PERFORMANCE AND LOGISTICS:
PRELIMINARY RESULTS,
Personal Author(s):
Rauner,R M
Report Date:
07 Apr 1959
Media Count:
36 Page(s)
Report Number(s):
S116
Report Classification:
Unclassified
Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0219515

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE APPLICATION OF DYNAMIC PROGRAMMING TO A CLASS OF IMPLICIT VARIATIONAL PROBLEMS

Personal Author(s):

BELLMAN,RICHARD

RICHARDSON,J M

Report Date:

06 Apr 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337764

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DEFLECTION OF BALLISTIC MISSILES BY NUCLEAR WEAPONS

Descriptive Note:

Research memo.

Personal Author(s):

Whitener, Jack E

Report Date:

02 Apr 1959

Media Count:

30 Page(s)

Report Number(s):

REPT.

RM2345

XC-USAF

Monitor Series:

USAF

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational use; 2 Apr 1959. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office Washington, DC 20330., Restricted Data

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0308776

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONCEPTS OF MILITARY SPACE OPERATIONS

Personal Author(s):

BUCHHEIM,R W

Report Date:

Apr 1959

Media Count:

23 Page(s)

Report Number(s):

S-117

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0312115

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LONG-RANGE INFRARED SEARCH THROUGH A CLOUDY ATMOSPHERE

Personal Author(s):

SARTOR,J D

Report Date:

Apr 1959

Media Count:

46 Page(s)

Report Number(s):

RM-2355

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0315102

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BALLISTIC MISSILE RANGES TO COVER SINO-SOVIET AND U.S. TARGETS: ON A ROTATING EARTH

Personal Author(s):

RUMMER, W I

RUSSELL, L J

Report Date:

Apr 1959

Media Count:

1 Page(s)

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0312187

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MANAGEMENT OF THE RADIO SPECTRUM

Personal Author(s):

DAVIE, M C

Report Date:

01 Apr 1959

Media Count:

143 Page(s)

Report Number(s):

RM-2337

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0230099

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A METHOD OF CONCEALING UNDERGROUND NUCLEAR EXPLOSIONS

Personal Author(s):

LATTER,A L

LELEVIER,R E

Report Date:

30 Mar 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: No Forn. Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0214945

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UNDERGROUND PHENOMENOLOGY. SUMMARY AND CONCLUSIONS. SECOND PROTECTIVE CONSTRUCTION SYMPOSIUM

Descriptive Note:

Research memo.,

Personal Author(s):

Brode,Harold L

Report Date:

27 Mar 1959

Media Count:

27 Page(s)

Report Number(s):

RM-2349

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0212201

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE GERMAN CRISIS: A FIELD REPORT. JANUARY-FEBRUARY

Personal Author(s):

SPEIER,H

DAVISON,W P

GOURE,L

Report Date:

20 Mar 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0215772

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NICKEL, COLUMBIUM, MOLYBDENUM AND TUNGSTEN. A PRELIMINARY STRUCTURAL
COMPARISON

Descriptive Note:

Research memo.,

Personal Author(s):

HOFFMANN,GEORGE A

Report Date:

18 Mar 1959

Media Count:

24 Page(s)

Report Number(s):

RM-2341

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224145

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DEFENSE PLANNING AND ORGANIZATION.

Personal Author(s):

Emthonen ,Alain

Rowen, Henry
Report Date:
17 Mar 1959
Media Count:
78 Page(s)
Report Number(s):
P-1640
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0214635
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON NETWORK FLOW FUNCTIONS. NOTES ON LINEAR PROGRAMMING AND EXTENSIONS. PART 50
Descriptive Note:
Research memo.,
Personal Author(s):
Shapley, L S
Report Date:
16 Mar 1959
Media Count:
21 Page(s)
Report Number(s):
RM-2338
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224279

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Sources, Availability and Estimated Costs of Propellants,

Report Date:

15 Mar 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224132

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SIMULATION OF A LARGE - SCALE MILITARY ACTIVITY,

Personal Author(s):

Geisler,Murray A

Report Date:

12 Mar 1959

Media Count:

23 Page(s)

Report Number(s):

P1555

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224278
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Some Aspects of a Personnel Program For Computer Programmers.
Report Date:
11 Mar 1959
Media Count:
11 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0312114
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) GENERALIZED COST FUNCTIONS FOR MACH 3 AIRFRAMES
Descriptive Note:
Research memo.,
Personal Author(s):
SMITH,R W
Report Date:
03 Mar 1959

Media Count:

51 Page(s)

Report Number(s):

RM-2336

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224143

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELIABILITY, QUALITY CONTROL, AND SIMULATION.

Personal Author(s):

Cahn,Albert S

Report Date:

02 Mar 1959

Media Count:

15 Page(s)

Report Number(s):

P1623

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0216108
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) An Annotated Bibliography of Rand Space Flight Publications.
Descriptive Note:
Research memo.
Report Date:
01 Mar 1959
Media Count:
53 Page(s)
Report Number(s):
RM-2113-1
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0314282
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) PROTECTION OF COMMUNICATIONS AND ELECTRONIC SYSTEMS: PAPERS PRESENTED IN THE RAND
SECOND PROTECTIVE CONSTRUCTION SYMPOSIUM (U)
Personal Author(s):
ELDRIDGE, F R
Report Date:
Mar 1959
Media Count:
1 Page(s)
Report Classification:
SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311338

Full Text (pdf) Availability:

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File: /UL/311338.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A STOCHASTIC MODEL OF FORCE SURVIVAL: APPLICATION TO MACRO-DISPERSAL AS A PROTECTIVE MEASURE

Descriptive Note:

Research memo.

Personal Author(s):

Carr, C R

Trinkl, F H

Report Date:

26 Feb 1959

Media Count:

91 Page(s)

Report Number(s):

RAND/RM-2343

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

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03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224142

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Nuclear Weapons and Limited War,

Report Date:

20 Feb 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0309552

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DISCRIMINATION ASPECTS OF ICBM DEFENSE

Descriptive Note:

Research memo.,

Personal Author(s):

RAYMOND,JOSEPH L

GAZLEY,CARL JR

Report Date:
20 Feb 1959
Media Count:
47 Page(s)
Report Number(s):
RM-2333
Contract Number:
AF 33(038)-6413
Report Classification:
SECRET
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0230073
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) CORONA RETARDENT FOR CAPACITORS
Report Date:
20 Feb 1959
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE
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Distribution: NO FORN. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB182014

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Estimated Damage to Space Vehicles,

Personal Author(s):

Bjork, Robert L

Gazley, Carl, Jr

Report Date:

20 Feb 1959

Media Count:

28 Page(s)

Report Number(s):

RM-2332

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224276

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXPERIMENTS IN SINGLE-POINT DATA PROCESSING IN A CONTROLLED ENVIRONMENT,

Personal Author(s):

Postley, J A

Report Date:

19 Feb 1959

Media Count:

8 Page(s)

Report Number(s):

P-1617

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224280

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FIRST ORDER ERROR PROPAGATION IN A STAGewise SMOOTHING PROCEDURE FOR SATELLITE
OBSERVATIONS,

Personal Author(s):

Swerling, Peter

Report Date:

18 Feb 1959

Media Count:

28 Page(s)

Report Number(s):

P-1674

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0310923

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RUSSIAN RESPONSE TO POLARIS.

Descriptive Note:

Special memo.

Report Date:

18 Feb 1959

Media Count:

50 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

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Technical Reports Collection

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AD0306008

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Laboratory Simulation of a Ballistic Missile Squadron: A Description of LP-II Phase 1.1,

Personal Author(s):

HAYTHORN,W W

Report Date:

17 Feb 1959

Media Count:

21 Page(s)

Report Number(s):

S-107

Contract Number:

AF 33(038)6413

Report Classification:

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09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338510

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LIMITED NUCLEAR WARFARE IN LIMITED WARS

Personal Author(s):

Cohen, S T

Report Date:

16 Feb 1959

Media Count:

48 Page(s)

Report Number(s):

B-102

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; FEB 1959. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: RAND Project Office, Washington, DC 20330. Restricted Data. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244723

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LUNAR RAYS: THEIR FORMATION AND AGE

Personal Author(s):

GIAMBONI, LOUIS A

Report Date:

13 Feb 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244718

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND ADAPTIVE PROCESSES: MATHEMATICAL FOUNDATION

Personal Author(s):

BELLMAN, R

KALABA, R

Report Date:

12 Feb 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224275
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Communication and Control Requirements in the Air Force Logistics System,
Report Date:
12 Feb 1959
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224141
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) The Federation of Rhodesia and Nyasaland: A Case Study in Economic Development,
Report Date:
12 Feb 1959
Media Count:
1 Page(s)
Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0218924

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Relativistic Self-Consistent Calculation for the Normal Uranium Atom,

Report Date:

10 Feb 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0211642

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET STATISTICS OF MEAT AND MILK OUT-PUT. A NOTE ON THEIR COMPARARABILITY OVER TIME

Personal Author(s):

NIMITZ,NANCY

Report Date:

06 Feb 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224150

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Pitfalls in Analysis,

Report Date:

06 Feb 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0215161

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MILITARY SUPERSONIC TRANSPORTS

Descriptive Note:

Research memo.,

Personal Author(s):

Cartaino,T F
Fisemann,D M
Schamberg,B
Report Date:
04 Feb 1959
Media Count:
48 Page(s)
Report Number(s):
RM-2327
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224136
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) REPORT ON A GENERAL PROBLEM-SOLVING PROGRAM,
Personal Author(s):
Newell,A
Shaw,J C
Simon,H A
Report Date:
Feb 1959
Media Count:
27 Page(s)
Report Number(s):
P1584
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0314126

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PRACTICABILITY OF EXTENDED-RANGE BALLISTIC MISSILES

Personal Author(s):

GORDON,GEORGE

Report Date:

Feb 1959

Media Count:

51 Page(s)

Report Number(s):

RM-2378

Contract Number:

AF-33(616)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

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Accession Number:

ADD501604

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RADAR ATTENUATION - COMPARISON OF THEORY AND EXPERIMENT

Personal Author(s):

LELEVIER,R E

Report Date:

30 Jan 1959

Media Count:

15 Page(s)

Report Number(s):

S-109

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

DOD

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224274

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Economics of Invention: A Survey of the Literature,

Report Date:

29 Jan 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311337

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/311337.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ROCKET-LAUNCHING THE B-58

Descriptive Note:

Research memo.

Personal Author(s):

Blakeslee, D J

Report Date:

28 Jan 1959

Media Count:

52 Page(s)

Report Number(s):

RAND/RM-2324

XC-AFRDC

Contract Number:

AF 49(638)-700

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Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224140
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) EVALUATING ALTERNATIVE EXPENDITURE PROGRAMS.
Personal Author(s):
McKean,Roland N
Report Date:
27 Jan 1959
Media Count:
24 Page(s)
Report Number(s):
P1602
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0215561
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) EVALUATION OF THE EFFECTS OF ENVIRONMENT ON REFUELING OPERATIONS
Personal Author(s):
SARTOR,J DOYNE
Report Date:
27 Jan 1959
Media Count:
27 Page(s)
Report Number(s):
RM-2322
Contract Number:
AF 33(038)-6413
Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0507213

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Destruction Rates for U. S. City Resources in the Event of Nuclear Attacks.

Descriptive Note:

Research memo.,

Personal Author(s):

Lavin ,M M

Report Date:

26 Jan 1959

Media Count:

41 Page(s)

Report Number(s):

RM-2331

Contract Number:

AF 49(638)-700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0211942

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE COMPUTATIONAL SOLUTION OF DYNAMIC PROGRAMMING PROCESSES. PART XI. A
FEEDBACK-CONTROL PROBLEM

Personal Author(s):

BELLMAN,RICHARD

DREYFUS,STUART

Report Date:

26 Jan 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0213259

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON THE NUMERICAL INTEGRATION OF NONLINEAR PARTIAL DIFFERENTIAL EQUATIONS

Descriptive Note:

Research memo.,

Personal Author(s):

BELLMAN,R

CHERRY,I

WING,G M

Report Date:

26 Jan 1959

Media Count:

5 Page(s)

Report Number(s):

RM-2318

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0212974

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LINEAR PROGRAMMING AND EXTENSIONS. PART 49. ON A LINEAR PROGRAMMING COMBINATORIAL
APPROACH TO THE TRAVELING SALESMAN PROBLEM

Personal Author(s):

DANTZIG,G B

FULKERSON,D R

JOHNSON,S M

Report Date:

26 Jan 1959

Media Count:

21 Page(s)

Report Number(s):

RM-2321

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0225228
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A MECHANICAL PROOF OF THE MIN-MAX THEOREM
Personal Author(s):
GROSS,O
Report Date:
26 Jan 1959
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
ADC065200
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) Warning against the Air-Breathing Threat
Personal Author(s):
Attaway, L D
Report Date:
23 Jan 1959
Media Count:
32 Page(s)
Report Number(s):
RAND/S-106
X0-XD
Monitor Series:
XD
Report Classification:
SECRET
Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0219799

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DAMAGE TO X-RAY DETECTORS BY METEORITES

Personal Author(s):

BROYLES,ARTHUR A

Report Date:

21 Jan 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224125

Full Text (pdf) Availability:

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File: /UL/224125.pdf

Size: 697 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Major Implications of a Current Non-Military Defense Study

Personal Author(s):

Kahn, Herman

Report Date:

20 Jan 1959

Media Count:

18 Page(s)

Report Number(s):

P-1497-RC

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0209021

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ECONOMICS OF INVENTION: A SURVEY OF THE LITERATURE

Personal Author(s):

NELSON,RICHARD R

Report Date:

15 Jan 1959

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0226129

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STRATEGY IN THE MISSILE AGE

Personal Author(s):

BRODIE, BERNARD

Report Date:

15 Jan 1959

Media Count:

423 Page(s)

Report Number(s):

R-335

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224273

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Preliminary Model Atmosphere Based on Rocket and Satellite Data,

Report Date:
12 Jan 1959
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

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Citation Format: FOIA(UL)

Accession Number:
AD0224138
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ECONOMIC CONSIDERATIONS OF SPACE FLIGHT GROUND SUPPORT REQUIREMENTS.
Personal Author(s):
Margolis ,M A
Pardee,F S
Report Date:
12 Jan 1959
Media Count:
17 Page(s)
Report Number(s):
P-1589
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB186492

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Problem of the Martian Blue Haze.

Personal Author(s):

Wilson, A G

Report Date:

12 Jan 1959

Media Count:

14 Page(s)

Report Number(s):

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

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Accession Number:

AD0215301

Full Text (pdf) Availability:

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File: /UL/215301.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A new Analytic Representation of Surface Interaction for Hyperthermal Free Molecule Flow with Application to Neutral-Particle Drag Estimates of Satellites

Descriptive Note:

Research memo.

Personal Author(s):

SCHAMBERG, R

Report Date:

08 Jan 1959

Media Count:

90 Page(s)

Report Number(s):

RM-2313

XC-USAF

Contract Number:

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Monitor Series:

USAF

Report Classification:

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Other requests shall be referred to Hq. Dept. of Air Force, Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0243951

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AVAILABILITY OF UPPER ATMOSPHERIC AND OTHER SELECTED DATA FROM THE I. G. Y.

Personal Author(s):

GREENFIELD, S M

Report Date:

07 Jan 1959

Media Count:

52 Page(s)

Report Number(s):

arpa-11-59

Monitor Series:

11-59

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: No Forn. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0243952

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SURVEY OF CURRENT RESEARCH IN GASEOUS ELECTRONICS IN THE UNITED STATES

Personal Author(s):

CULVER,W H

GEBALLE,R

TAMARKIN,P

Report Date:

07 Jan 1959

Media Count:

98 Page(s)

Report Number(s):

ARPA-11-59

Monitor Series:

11-59

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354468

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DESCRIPTION OF A HYPOTHETICAL NON-NUCLEAR LIMITED WAR,

Personal Author(s):

Deweerd ,H A

Ellis,J W , Jr

Greene ,T E

Sallagar,F M

Report Date:

02 Jan 1959

Media Count:

169 Page(s)

Report Number(s):

RM-2428

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311391

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A POLITICAL AND MILITARY STUDY OF A HYPOTHETICAL NON-NUCLEAR LIMITED WAR

Descriptive Note:

Research memo.

Personal Author(s):

DeWeerd, H A

Ellis ,Jr , J W
Greene, T E
Sallagar, F M
Report Date:
02 Jan 1959
Media Count:
74 Page(s)
Report Number(s):
RAND/RM-2427
XC-AFRDC
Monitor Series:
AFRDC
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED
Distribution Statement:
Controlling DoD Organization: Deputy Chief of Staff Research and Development (Air Force), Attn: Project
Rand Office, Washington, DC 20330.

Technical Reports Collection

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Accession Number:
AD0231659
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/231659.pdf
Size: 18 MB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) PROCEEDINGS OF THE SECOND PROTECTIVE CONSTRUCTION SYMPOSIUM (DEEP UNDERGROUND
CONSTRUCTION). VOLUME 1. MARCH 24, 25, 26, 1959
Personal Author(s):
O'SULLIVAN, J J
Report Date:
Jan 1959
Media Count:

461 Page(s)

Report Number(s):

XC-AFRDC

Contract Number:

AF 49(368)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0305457

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUNLAMP DOSAGES AS A FUNCTION OF ANGLE OF ARRIVAL

Personal Author(s):

MARCUM,J I

Report Date:

Jan 1959

Media Count:

1 Page(s)

Report Number(s):

RM-2315

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224137

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Masers and Irasers,

Report Date:

30 Dec 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338842

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A SURVEY OF THE ELECTROMAGNETIC EFFECTS OF HIGH ALTITUDE NUCLEAR DETONATIONS

Descriptive Note:

Final rept.

Personal Author(s):

Crain, C M

Hendrick, Jr , R W

Hoffman, W C

Tamarkin, P

Report Date:

29 Dec 1958

Media Count:

90 Page(s)

Report Number(s):

RM-2302-ARPA

QKR-2

XD-ARPA

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51 - RESTRICTED DATA

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0309142

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NEW CONCEPT IN THE USE OF HEF-3 HIGH-ENERGY AIRCRAFT FUEL

Personal Author(s):

DOLE,S H

WECHSLER,J W

Report Date:

24 Dec 1958

Media Count:

31 Page(s)

Report Number(s):

RM-2316

Contract Number:

AF 33(038)64

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224147

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECTS OF A METEOROID IMPACT ON STEEL AND ALUMINUM IN SPACE.

Personal Author(s):

Bjork,R L

Report Date:

16 Dec 1958

Media Count:

24 Page(s)

Report Number(s):

P1662

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224271

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Some Attributes of the Changing Society,
Report Date:
15 Dec 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0207901
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SELECTED LIST OF UNCLASSIFIED PUBLICATIONS OF THE ECONOMICS DIVISION OF THE RAND CORPORATION
Report Date:
15 Dec 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0288172

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ENVIRONMENTAL REQUIREMENTS FOR EXTENDED OCCUPANCY OF MANNED SATELLITES

Personal Author(s):

DOLE,S H

Report Date:

12 Dec 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: DDC users only. Availability: Microfilm only after original copies exhausted.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224129

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Some Complexities in Military Planning.

Report Date:

11 Dec 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224134

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DEVELOPMENT OF MAN-MACHINE SIMULATION TECHNIQUES.

Report Date:

10 Dec 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0209538

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DYNAMIC, SINGLE-ITEM, MULTI-ECHELON INVENTORY MODEL

Personal Author(s):

CLARK,A J

Report Date:

08 Dec 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224270

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Money and the Interest Rate in a Neoclassical World,

Report Date:

04 Dec 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0243051

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DISCUSSION OF SPACE VEHICLE GUIDANCE PROBLEMS

Personal Author(s):

SMITH,F T

Report Date:

04 Dec 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0211944

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLAR SYSTEM RADIO RADIATION

Personal Author(s):

KRAUS,JOHN D

Report Date:

Dec 1958

Media Count:

1 Page(s)

Report Number(s):

SR1 AAF19 604 1591

AFCRL-TN59 148

Monitor Series:

TN59 148

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0305657

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NUMERICAL SOLUTIONS OF THE AXIALLY SYMMETRIC HYPERVELOCITY IMPACT PROCESS INVOLVING IRON

Personal Author(s):

BJORK, R L

Report Date:

Dec 1958

Media Count:

45 Page(s)

Report Number(s):

S-103

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization...Department of the Air Force, Attn: Public Affairs Office, Washington DC, 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224133

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Distribution of a Drug in the Body,

Report Date:

01 Dec 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0305658

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME EFFECTS OF A LOW-ALTITUDE NUCLEAR EXPLOSION ON THE PROPAGATION OF
ELECTROMAGNETIC WAVES

Personal Author(s):

GLASSGOLD, A E

Report Date:

01 Dec 1958

Media Count:

39 Page(s)

Report Number(s):

RM-2293

Contract Number:

AF33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0306151

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LP-II - THE STUDY OF A LOGISTICS SYSTEM FOR INTERCONTINENTAL BALLISTIC MISSILES

Personal Author(s):
GEISLER,MURRAY A
Report Date:
Dec 1958
Media Count:
17 Page(s)
Report Number(s):
S-108
Contract Number:
AF 33(038)-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0244722
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SATELLITE PERTURBATIONS RESULTING FROM LUNAR AND SOLAR GRAVITATIONAL EFFECTS
Personal Author(s):
LEVIN,E
Report Date:
01 Dec 1958
Media Count:
28 Page(s)
Report Classification:
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Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE
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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244715

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A LAYMAN'S REVIEW OF PROPULSION AND PROPELLANTS FOR SPACE FLIGHT

Personal Author(s):

GOLDSMITH,M

Report Date:

01 Dec 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0219175

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THERMODYNAMIC PROPERTIES OF THE ATMOSPHERE OF VENUS

Personal Author(s):

RAYMOND,J L

Report Date:

26 Nov 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0210003
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) THE SOVIET UNION AND THE ATOM: PEACEFUL SHARING, 1954-1958
Personal Author(s):
JONAS, ANNE M
Report Date:
20 Nov 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE
Distribution Statement:
Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0340551
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) CRITICAL COMMUNICATIONS AND HIGH-ALTITUDE NUCLEAR EXPLOSIONS. A PROPOSED SOLUTION
EMPLOYING ORBIT ING CHAFF

Personal Author(s):

Bedrosian,E

Squires,W K

Report Date:

17 Nov 1958

Media Count:

56 Page(s)

Report Number(s):

RM-2294

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0211149

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INVARIANT IMBEDDING AND WAVE PROPAGATION IN STOCHASTIC MEDIA

Personal Author(s):

BELLMAN,RICHARD

KALABA,ROBERT

Report Date:

17 Nov 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0231276

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PHYSICAL ENVIRONMENT OF SOUTHERN BAFFIN ISLAND NORTHWEST TERRITORIES, CANADA

Report Date:

15 Nov 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224131

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMULATION MODEL OF AIR FORCE MAINTENANCE OPERATIONS.

Personal Author(s):

Levine ,R A

Rainey,R B

Report Date:

13 Nov 1958

Media Count:

10 Page(s)

Report Number(s):

P1548

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0208311

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON LINEAR PROGRAMMING: PART XLVIII. INEQUALITIES FOR STOCHASTIC LINEAR PROGRAMMING PROBLEMS

Personal Author(s):

MADANSKY,ALBERT

Report Date:

13 Nov 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244720

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RADIOINTERFERENCE PHENOMENA CAUSED BY THE IONOSPHERE OF THE MOON

Personal Author(s):

GURZADYAN,G A

Report Date:

10 Nov 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0312598

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SPACE FLIGHT AND INTERCONTINENTAL MISSILE CAPABILITIES OF EXISTING OR PROGRAMMED
LIQUID-ROCKET PROPULSION SYSTEMS

Personal Author(s):

GOLDSMITH,M

HEFFERN,E C

Report Date:

10 Nov 1958

Media Count:

6 Page(s)

Report Number(s):

S-101

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0304021

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MISSILE SYSTEM RELIABILITY AS A FUNCTION OF MAINTENANCE

Personal Author(s):

MC GLOTHLIN,W H

Report Date:

06 Nov 1958

Media Count:

30 Page(s)

Report Number(s):

S-100

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224122

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MEANING AND VALIDITY OF INFLATION-INDUCED BUSINESS PROFITS RESULTING FROM A LAG OF WAGES BEHIND PRICES.

Personal Author(s):

Alchian ,A A

Kessel,R A

Report Date:

06 Nov 1958

Media Count:

58 Page(s)

Report Number(s):

P-1488

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337981

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VULNERABILITY OF DETERRENCE COMMUNICATIONS AND CONTROL

Personal Author(s):

Eldridge,F R

Report Date:

05 Nov 1958

Media Count:

25 Page(s)

Report Number(s):

S99

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0306648

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/306648.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A SIMPLIFIED MODEL FOR FALLOUT COMPUTATIONS, PART II

Personal Author(s):

RAPP, R R

WALTERS, P A

Report Date:

Nov 1958

Media Count:

45 Page(s)

Report Number(s):

RM-2296

AFSWP-1116

XV-1116

Contract Number:

AF 33(038)-6413

Monitor Series:

1116

DTRA

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0306982

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:
(U) THE VERSATILITY OF CURRENT MISSILES IN SPACE ROLES
Personal Author(s):
OELSCHLAGER, R T
Report Date:
Nov 1958
Media Count:
24 Page(s)
Report Number(s):
RM2181
Contract Number:
AF 33(038)-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0305762
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) THE NEXT DECADE IN COUNTERMEASURES WITH OFFENSE SYSTEMS
Personal Author(s):
HULT, J L
Report Date:
Nov 1958
Media Count:
18 Page(s)
Report Number(s):
S-104
Contract Number:
AF33(038)-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0305562

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE PROBLEM OF SMOOTHING IN PREDICTION OF BALLISTIC MISSILE PATHS

Personal Author(s):

REICH,EDGAR

Report Date:

01 Nov 1958

Media Count:

1 Page(s)

Report Number(s):

RM-2226

Contract Number:

AF33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224130

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Low-Thrust Transfer Between Circular Orbits.

Report Date:

31 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0210498

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXPERIMENTAL DESIGN, TEST, AND EVALUATION OF AN F-100D FLYAWAY KIT

Personal Author(s):

OKUN, BERNARD

Report Date:

31 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0207752

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PRELIMINARY MODEL ATMOSPHERE BASES ON ROCKET AND SATELLITE DATA

Personal Author(s):

KALLMANN,H L

JUNCOSA,M L

Report Date:

30 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244729

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON LUNAR AND PLANETARY EXPERIMENTS

Personal Author(s):

GREENFIELD,S M

Report Date:

29 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0225892

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Correlation of the Critical Conditions for Homogeneous Bare Reactors.

Descriptive Note:

Research memo.,

Personal Author(s):

Pinkel,Benjamin

Young,G B W

Report Date:

29 Oct 1958

Media Count:

49 Page(s)

Report Number(s):

RM-2280

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224128

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SYSTEMS ANALYSIS VERSUS SYSTEMS DESIGN,

Personal Author(s):

Wohlstetter,A J

Report Date:

29 Oct 1958

Media Count:

59 Page(s)
Report Number(s):
P1530
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0341117
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) POLARIS WEAPON SYSTEM
Personal Author(s):
Oliver,E P
Report Date:
28 Oct 1958
Media Count:
132 Page(s)
Report Classification:
SECRET
Distribution Limitation(s):
13 - U.S. GOVT. ONLY; NON-DOD CONTROLLED
51 - RESTRICTED DATA
Distribution Statement:
Notice: Only government agencies may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224934

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) EAST BLOC FORGERIES: A WEAPON IN THE COLD WAR.
Personal Author(s):
Schnitzer,E W
Report Date:
24 Oct 1958
Media Count:
6 Page(s)
Report Number(s):
T103
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0225891
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/225891.pdf
Size: 2 MB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) A HANDBOOK FOR ESTIMATING MATERIAL REQUIREMENTS AND COSTS OF SHELTER DOORS
SUBJECTED TO LONG-DURATION BLAST LOADING
Descriptive Note:
Research memo.
Personal Author(s):
SANDOVAL, C A
Report Date:
24 Oct 1958
Media Count:
44 Page(s)

Report Number(s):

RM-2277

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational use; 24 Oct 1958. Other requests shall be referred to Department of the Air Force, Washington DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0209022

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN OPTIMAL-INVENTORY MODEL

Personal Author(s):

GROSS,OLIVER

Report Date:

24 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224269

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Economic Developmnt of Morocco,

Report Date:

21 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224127

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Reliability Estimating by the Use of Random Sampling Simulation.

Report Date:

20 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150670

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PHYSICAL ENVIRONMENT OF THE GREAT BEAR RIVER AREA,NORTHWEST TERRITORIES, CANADA

Report Date:

18 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0210147

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN MACHINE TRANSLATION--9' BIBLIOGRAPHY OF RUSSIAN SCIENTIFIC ARTICLES

Personal Author(s):

EDMUNDSON,H P

HARPER,K E

Report Date:

16 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244706

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NEXT STEP IN AIR FORCE CENTRALIZATION OF INVENTORY RECORDKEEPING AND SUPPLY DATA
PROCESSING

Descriptive Note:

Research memo.

Personal Author(s):

GAINEN,LEON

Report Date:

16 Oct 1958

Media Count:

54 Page(s)

Report Number(s):

RM-2269

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0205871

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RESPONSE OF HYPOTHETICAL MISSILE TRANSPORT EQUIPMENT TO NUCLEARBLAST

Personal Author(s):

ELSWICK,W R

Report Date:

16 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341116

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE RISK OF AN ACCIDENTAL OR UNAUTHORIZED NUCLEAR DETONATION

Personal Author(s):

Ikle,Fred Charles

Report Date:

15 Oct 1958

Media Count:

185 Page(s)

Report Number(s):

RM2251

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution: US Gov't agencies only; others to Headquarters, United States Air Force, ATTN: RDQM.
Washington, DC 20350.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0209422

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MINIMAL IMPULSE REQUIREMENTS FOR DISORBITING SATELLITES

Personal Author(s):

BLUMENTHAL,I S

Report Date:

15 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311001

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REVIEW OF ATLAS AND TITAN MISSILE DEVELOPMENTS.

Descriptive Note:

Special memo.,

Personal Author(s):

Buchheim,R W

Heffern,E C

Report Date:

08 Oct 1958

Media Count:

78 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Release only to Department of Defense agencies is authorized. Other certified requesters shall obtain release approval from Deputy Chief of Staff, Development, Hq., USAF. Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0209536

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CLASS FUNCTION-SPACE GAMES

Personal Author(s):

GROSS,O

Report Date:

08 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224034

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Fitting of Straight Lines When Both Variables Are Subject to Error,

Report Date:
07 Oct 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
ADB186487
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) Spectrographic Observations of the Blue Haze in the Atmosphere of Mars.
Personal Author(s):
Wilson, A G
Report Date:
06 Oct 1958
Media Count:
9 Page(s)
Report Number(s):
RAND/P-1509
XD-XD
Monitor Series:
XD
Report Classification:
Unclassified
Distribution Limitation(s):
12 - U.S. GOVT. AND THEIR CONTRACTORS
Distribution Statement:
Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339272

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRELIMINARY ESTIMATES OF A NOVEL METHOD OF LONG RANGE RADIO BLACKOUT

Personal Author(s):

Tucker,B L

Report Date:

05 Oct 1958

Media Count:

21 Page(s)

Report Number(s):

RM-2291

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0304427

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CURRENT CONCEPTS OF DEFENSE AGAINST BALLISTIC MISSILES

Personal Author(s):

BLUMENTHAL,I S

Report Date:

01 Oct 1958

Media Count:

16 Page(s)
Report Number(s):
RAND/R-S-97
Contract Number:
AF 33(038)-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0305458
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) INFRARED TECHNIQUES AND PROBLEMS OF THE FUTURE
Personal Author(s):
GELINAS, R W
Report Date:
Oct 1958
Media Count:
18 Page(s)
Report Number(s):
S-98
Contract Number:
AF33(038)-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0206554

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE LINEAR RELATION BETWEEN THE SOFTENING TEMPERATURE AND THE MELTING POINT OF CERAMICS

Personal Author(s):

HOFFMAN,GEORGE A

KNAPP,WILLIAM J

Report Date:

01 Oct 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224120

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMICS OF THE MOSCOW-PEKING AXIS,

Personal Author(s):

Whiting,Allen S

Report Date:

29 Sep 1958

Media Count:

25 Page(s)

Report Number(s):

P1447

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311336

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/311336.pdf

Size: 4 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE MANUFACTURE AND DELIVERY OF LIQUID OXYGEN AND LIQUID NITROGEN TO ICBM SITES

Descriptive Note:

Research memo.

Personal Author(s):

Kamins, M

Zabel, E

Report Date:

26 Sep 1958

Media Count:

104 Page(s)

Report Number(s):

RAND/RM-2261

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; SEP 1958. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of Staff, Research and Technology, Hq, USAF, Project Rand Office, Washington DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0211941

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE GROWTH OF DUTY CYCLE IN INTERMITTENT COMMUNICATION SYSTEMS

Personal Author(s):

BEDROSIAN, EDWARD

Report Date:

23 Sep 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0312782

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AIRBORNE FERRET RANGING

Personal Author(s):

BURKE, T F

Report Date:

19 Sep 1958

Media Count:

19 Page(s)

Report Number(s):

S-96

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224123

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Progress Curve Computer.

Report Date:

17 Sep 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: Microfiche only after original copies exhausted.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB951488

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Project Full House Logistics Data.

Descriptive Note:

Research memo.,

Personal Author(s):

Smith,T C

Bristol,R B

Beverly,R S

Report Date:

16 Sep 1958

Media Count:

115 Page(s)

Report Number(s):

RAND/RM-2256

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution limited to U.S. Gov't. agencies only; Test and Evaluation; 3 Mar 80. Other requests for this document must be referred to Deputy Chief of Staff Research, Development and Acquisition (Air Force), Attn: RDQM. Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337762

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PROTECTION OF COMMUNICATIONS TERMINAL FACILITIES AND LANDLINE ROUTES

Personal Author(s):

Eldridge,F R

Report Date:

12 Sep 1958

Media Count:

39 Page(s)

Report Number(s):

RM2299

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337789

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARATIVE EVALUATION OF 1961 AIR DEFENSE SURVEILLANCE NETWORKS FROM THE POINT
OF VIEW OF WARNING

Personal Author(s):

Mickey,M R

Report Date:

12 Sep 1958

Media Count:

126 Page(s)

Report Number(s):

RM2255

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0204420
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON THE PREVENTION OF SUPRISE ATTACK
Personal Author(s):
TALENSKI,N
HOEFFDING,OLEG
Report Date:
10 Sep 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0207751
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) THEORETICAL DEVELOPMENT FOR LIFTING RING-BODY CONFIGURATIONS
Personal Author(s):
JOHNSON, ROGER P
Report Date:
09 Sep 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:
Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224121

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Multiple Quadrature by Monte Carlo.

Report Date:

05 Sep 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156049

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Correlation Energy of a Degenerate Electron Gas,

Report Date:

05 Sep 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224046
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Chess-Playing Programs and the Problem of Complexity,
Report Date:
04 Sep 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0305049
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE STRATEGIC OPERATIONS MODEL
Descriptive Note:
Research memo.,
Personal Author(s):
DALKEY,N C
WEGNER,L H
Report Date:

02 Sep 1958
Media Count:
79 Page(s)
Report Number(s):
RM-2250
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0206553
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON THE COMPUTATIONAL SOLUTION OF DYNAMIC-PROGRAMMING PROCESSES. XVI. RELIABILITY OF
MULTICOMPONENT DEVICES
Personal Author(s):
BELLMAN,RICHARD
DREYFUS,STUART
Report Date:
02 Sep 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338901

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THEORETICAL DESCRIPTION OF THE EARLY PHASES OF THE FIREBALL FOR A VERY HIGH ALTITUDE
MEGATON EXPLOSION

Descriptive Note:

Research memo.

Personal Author(s):

Brode, Harold L

Report Date:

02 Sep 1958

Media Count:

47 Page(s)

Report Number(s):

RAND/RM-2249

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use;
SEP 1958. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air
Force), Attn: Project Rand Office, Washington, DC 20330. Restricted Data. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356165

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A STUDY OF A PROPOSED SOUTHERN EARLY WARNING PERIMETER

Personal Author(s):

Giller,L L

Report Date:

01 Sep 1958

Media Count:

125 Page(s)

Report Number(s):

RM788

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified re-questers shall obtain release approval from Director of Planning, AFRDP, USAF, Wash. 25,D. C.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0207200

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RECENT RESULTS OF HIGH ALTITUDE RESEARCH BY MEANS OF ROCKETS AND SATELLITES

Personal Author(s):

KALLMANN,H K

Report Date:

28 Aug 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0306512

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE APPLICATION OF CORRELATION TECHNIQUES TO PASSIVE SURVEILLANCE SYSTEMS,

Personal Author(s):

Dohoo, Roy M

Report Date:

26 Aug 1958

Media Count:

61 Page(s)

Report Number(s):

RM-2241

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339433

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECT OF VULNER-LITY ON ICBM POSTURES AND COSTS

Personal Author(s):

Cahn,A S

Report Date:

22 Aug 1958

Media Count:

38 Page(s)

Report Number(s):

RM2239

Report Classification:

SECRET

Distribution Limitation(s):

14 - DOD ONLY; NON-DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156050

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Complements and Substitutes in the Optimal Assignment Problem,

Report Date:

22 Aug 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224064

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A NEW LOOK AT EXPERIENCE RATING,
Personal Author(s):
Wagner,Harvey M
Report Date:
20 Aug 1958
Media Count:
22 Page(s)
Report Number(s):
P1465
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0340559
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) PROGRAMMED WARNING OF US-BASED SAC AGAINST AIR-BREATHING THREATS-PROBLEMS AND
SUGGESTED SOLUTIONS
Personal Author(s):
Attaway,L D
Report Date:
18 Aug 1958
Media Count:
68 Page(s)
Report Number(s):
RM-2236
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156048

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Studies in Machine Translation-3; Resume of Machine Codes and Card Formats,

Report Date:

18 Aug 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0330851

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHAT MILITARY-APPLICATION PLANNERS /NEED TO KNOW/ ABOUT INFRARED TARGET RADIATION CHARACTERISTICS /U/

Report Date:

16 Aug 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156033

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Design Change History of F-100 HI-VALU Air-Frame Spare Parts,

Report Date:

15 Aug 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311390

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/311390.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) FALCON MISSILE CHECKOUT RELIABILITY OVER TIME

Descriptive Note:

Research memo.

Personal Author(s):

McGlothlin, W H

Yorshis, P R

Report Date:

15 Aug 1958

Media Count:

64 Page(s)

Report Number(s):

RAND/RM-2243

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; AUG 1958. Other requests shall be referred to Deputy Chief of Staff, Research and Technology, USAF, Directorate of Development Planning, Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0214634

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) WAR AND THE SOVIET UNION. NUCLEAR WEAPONS AND THE REVOLUTION IN SOVIET MILITARY AND POLITICAL THINKING

Personal Author(s):

Dinerstein, H S

Report Date:

11 Aug 1958

Media Count:

265 Page(s)

Report Number(s):

R-326

Contract Number:

AF

33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0209537

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PROBLEM IN SPECTRUM ESTIMATION

Personal Author(s):

SWERLING,P

Report Date:

08 Aug 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311334

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/311334.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OVERSEAS STOCKAGE FOR ZI-BASED TACTICAL AIR FORCES

Descriptive Note:

Research memo.

Personal Author(s):

Sharpe, William F

Report Date:

08 Aug 1958

Media Count:

57 Page(s)

Report Number(s):

RAND/RM-2228

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; AUG 1958. Other requests shall be referred to Deputy Chief of Staff, Research and Technology, USAF, Directorate of Development Planning, Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224062

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Simulation Laboratory as a Developmental Tool.

Report Date:

07 Aug 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224268

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Earth-Period (24-Hour) Satellites,

Report Date:

07 Aug 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338899

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE AREA LAWS OF FALLOUT

Descriptive Note:

Research memo.

Personal Author(s):

LeLevier, R E

Report Date:

06 Aug 1958

Media Count:

61 Page(s)

Report Number(s):

RM-2231

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 06 AUG 1958. Other requests shall be referred to Deputy Chief of Staff for Research and Development, Department of the Air Force, Washington, DC 20330. Restricted Data. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244721

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LUNAR FLIGHT DYNAMICS

Personal Author(s):

BUCHHEIM,R W

LIESKE,H A

Report Date:

06 Aug 1958

Media Count:

62 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: No Forn, Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224066

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Propagation of Errors in Keplerian Orbits.

Report Date:

01 Aug 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311335

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE LIMITED WAR POSTURES OF TACTICAL AIR FORCES,

Personal Author(s):

Niskanen,W A

Report Date:

01 Aug 1958

Media Count:

48 Page(s)

Report Number(s):

MN RM2227

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Release only to U. S. Government agencies is authorized. Other certified requesters shall obtain release approval from Directorate of Development Planning, Deputy Chief of Staff, Research and Technology, Hq. USAF, Washington, D. C.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156027

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Meaning of Limited War,

Report Date:

30 Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0214846
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE FREE-FREE GAUNT FACTOR IN AN IONIZED MEDIUM
Descriptive Note:
Research memo.,
Personal Author(s):
Green,J M
Report Date:
29 Jul 1958
Media Count:
63 Page(s)
Report Number(s):
RM-2223
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0205872
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) RELATIVISTIC SELF-CONSISTENT CALCULATION FOR THE NORMAL MERCURY ATOM

Personal Author(s):

COHEN,STANLEY

Report Date:

28 Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0205421

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROPOSED NON-STOICHIOMETRIC CERAMICS

Personal Author(s):

KNAPP,W J

Report Date:

28 Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0304988

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE STRATEGIC OPERATIONS MODEL. A SUMMARY REPT:
Descriptive Note:
The Strategic Operatons Model.
Personal Author(s):
DALKEY,N C
WEGNER,L H
Report Date:
28 Jul 1958
Media Count:
25 Page(s)
Report Number(s):
RM-2221
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0341379
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOVIET STRATEGIC THINKING, FEBRUARY 1958
Personal Author(s):
Dinerstein,H S
Report Date:
24 Jul 1958
Media Count:
9 Page(s)
Report Number(s):
RM2219

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

13 - U.S. GOVT. ONLY; NON-DOD CONTROLLED

Distribution Statement:

Notice: Only government agencies may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224060

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Space Communications.

Report Date:

23 Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156026

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Anatomy of Deterrence,

Report Date:

23 Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224267

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOCIAL CHARGES IN THE EEC COUNTRIES: SOME ECONOMIC ASPECTS,

Personal Author(s):

Hald, Majorie

Report Date:

22 Jul 1958

Media Count:

28 Page(s)

Report Number(s):

P1439

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0319594

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHISTLERS, ROCKET FLAMES, AND LONG-RANGE ICBM DETECTION

Personal Author(s):

HOFFMAN,WILLIAM C

Report Date:

22 Jul 1958

Media Count:

8 Page(s)

Report Number(s):

S-92

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0304816

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DISCUSSION OF SOME LUNAR ROCKET GUIDANCE PROBLEMS

Personal Author(s):

DAVIS,M R

ROWELL,L N

Report Date:

21 Jul 1958

Media Count:

47 Page(s)

Report Number(s):

RAND/R-2216

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156044

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Cast Implications of Automating Air Force Test Equipment. A Suggested Procedural Approach.

Descriptive Note:

Research memo.,

Personal Author(s):

Barbour,A A

Report Date:

18 Jul 1958

Media Count:

19 Page(s)

Report Number(s):

RM-2229

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339853

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME ESTIMATES OF RADAR BLACKOUT

Descriptive Note:

Research memo.

Personal Author(s):

Latter, R

LeLevier, R E

Report Date:

18 Jul 1958

Media Count:

13 Page(s)

Report Number(s):

RAND/RM-2214

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUL 1958. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: RAND Project Office, Washington, DC 20330. Restricted Data. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156025

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Reflection Factors for Normally Reflected Shocks in Air,

Report Date:

14 Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156045

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A Report on the British Infrared Program.

Descriptive Note:

Trip rept.,

Personal Author(s):

Ballard, Stanley S

Report Date:

10 Jul 1958

Media Count:

17 Page(s)

Report Number(s):

S-91

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156034

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Cost and Performance Data from LP-I. The First Experiment in Simulation by the Logistics Systems Laboratory,

Report Date:

09 Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224055

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Middle East Crises and World Petroleum Movements.

Report Date:

08 Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0226412

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME SPECIFIC SUGGESTIONS FOR ACHIEVING EARLY NON-MILITARY DEFENSE CAPABILITIES AND
INITIATING LONG-RANGE PROGRAMS

Descriptive Note:

Research memo.,

Personal Author(s):

KAHN,HERMAN

Report Date:

01 Jul 1958

Media Count:

111 Page(s)

Report Number(s):

RM-2206-RC

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156016

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Aerodynamic Characteristics and Geometric Properties of Half- and Complete-Ring-Body
Configurations for Supersonic Design Mach Number

Report Date:

Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156042

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Laboratory Evaluation of Supply and Procurement Policies. The First Experiment of the Logistics Systems Laboratory

Report Date:

Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156047

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Notes on Linear Programming. Part XLVII. Solving Linear Programs in Integers,

Report Date:

Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156023

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Military Reliability of the Hungarian Armed Forces.

Descriptive Note:

Research memo.,

Personal Author(s):

KECSKEMETI,PAUL

Report Date:

01 Jul 1958

Media Count:

132 Page(s)

Report Number(s):

RM-2204

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156028

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Laboratory Evaluation of Supply and Procurement Policies. The First Experiment of Logistics Systems Laboratory

Report Date:

Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156017

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Condition of the Soviet Economy,

Report Date:

01 Jul 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156038

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Spatial Model of U.S. Petroleum Refining,

Report Date:

30 Jun 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356176

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SAC UTILIZATION OF U.S. ZI. CIVIL AIRFIELDS: AIRCRAFT/RUNWAY COMPATIBILITY

Personal Author(s):

Dudley,V S

Report Date:

25 Jun 1958

Media Count:

148 Page(s)

Report Number(s):

RM2352

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified requesters shall obtain release approval from Director of Planning, AFRDP, USAF, Wash. 25, D. C.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0206441

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IMPLEMENTING LOGISTICS POLICIES IN LABORATORY PROBLEM 1 LP-1)

Personal Author(s):

CLARK, A J

PAULSON, R M

Report Date:

25 Jun 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244716

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CIRCUMLUNAR TRAJECTORY STUDIES

Personal Author(s):

LIESKE,H A

Report Date:

25 Jun 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224369

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

20 Jun 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224368

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME STATISTICAL METHODS OF POTENTIAL VALUE IN RADIO WAVE PROPAGATION
INVESTIGATIONS,

Personal Author(s):

Hoffman, W C

Report Date:

18 Jun 1958

Media Count:

36 Page(s)

Report Number(s):

P-1396

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0452993

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/452993.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SAC UTILIZATION OF U.S.Z.I. CIVIL AIRFIELDS: RUNWAY CHARACTERISTICS

Descriptive Note:

Research memo.

Personal Author(s):

Wilson, James A

Report Date:

17 Jun 1958

Media Count:

94 Page(s)

Report Number(s):

RAND-RM-2351

XC-DCSRTAF-DDP

Contract Number:

AF 49(638)-700

Monitor Series:

DCSRTAF-DDP

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 17 JUN 1958. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of Staff, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338574

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ICBM DETERRENT CAPABILITY AND FALLOUT

Personal Author(s):

Tucker,B L

Report Date:

17 Jun 1958

Media Count:

13 Page(s)

Report Number(s):

RM2196

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224033

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Meaning of Limited War,

Report Date:

10 Jun 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0305048

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/305048.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A SIMPLIFIED MODEL FOR FALLOUT CALCULATIONS

Personal Author(s):

RAPP, R R

Report Date:

09 Jun 1958

Media Count:

44 Page(s)

Report Number(s):

RM-2193

AFSWP-1097

XV-1097

Contract Number:

AF 33(038)-6413

Monitor Series:

1097

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Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/ Operational; 12 May 99. Other requests shall be referred to Defense Threat Reduction Agency, 45045 Aviation Dr., Dulles, VA 20161-7517.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224362

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Controlling Consumers during Future Wars and Their Aftermaths,

Report Date:

04 Jun 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0353023

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESTIMATED COST IMPLICATIONS OF USAF PROGRAM P-60-1 (EXTENDED)

Report Date:

04 Jun 1958

Media Count:

67 Page(s)

Report Number(s):

RM2195

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified re-questers shall obtain release approval from Development Planning, AFRDP, Hqs, U. S. AirForce, Wash, 25, D. C.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156032

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PRELIMINARY COMPARISON OF VTOL AND STOL TRANSPORT AIRCRAFT

Descriptive Note:

Research memo.

Personal Author(s):

SMITH,G K

Report Date:

03 Jun 1958

Media Count:

23 Page(s)

Report Number(s):

RM-2192

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0207450

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME APPLICATIONS OF DYNAMIC PROGRAMMING TO COMMUNICATION AND INFORMATION THEORY

Personal Author(s):

BELLMAN,RICHARD

KALABA,ROBERT

Report Date:

03 Jun 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341086

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) POSSIBLE SOVIET TACTICS

Personal Author(s):

Jackson, Victor G

Report Date:

02 Jun 1958

Media Count:

20 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only government agencies may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0333846

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INFRARED CHARACTERISTICS OF THE B-70 AND THEIR OPERATIONAL IMPLICATIONS

Personal Author(s):

GELINAS, R W

Report Date:

Jun 1958

Media Count:

73 Page(s)

Report Number(s):

RM-2198

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156018

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Middle East Crises and World Petroleum Movements,

Report Date:

26 May 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339604

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NOTES ON POTENTIAL MILITARY SPACE SYSTEMS

Descriptive Note:

Research memo.

Personal Author(s):

Buchheim, R W

Report Date:

23 May 1958

Media Count:

305 Page(s)

Report Number(s):

RAND/RM-2179

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 1958. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: Project Rand Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156021

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Photographic System for Close-Up Lunar Exploration,

Report Date:

23 May 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156040

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Plastic Behavior of Thin Plates Under Normal Pressure,

Report Date:

22 May 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB951486

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Costs of Procurement Deferral with Interim Contractor Support: Hi-Valu Airframe Spares.

Descriptive Note:

Research memo.,

Personal Author(s):

Steger, Wilbur A

Report Date:

22 May 1958

Media Count:

59 Page(s)

Report Number(s):

RAND/RM-2182

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156001

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Notes on Linear Programming: Part XLVI. Bounds on the Primal-Dual Computation for Transportation Problems,

Report Date:

21 May 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0156010
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) The Simulated Aircraft and its Failure Model in LP-1,
Report Date:
21 May 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0338550
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) OPENING REMARKS BY CHAIRMAN AT HIGH ALTITUDE SYMPOSIUM HELD JANUARY 27, 1958 AT ORO
Personal Author(s):
Latter, Albert L
Report Date:
19 May 1958
Media Count:
10 Page(s)
Report Number(s):
Rept. no. S86
Report Classification:
SECRET
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
51 - RESTRICTED DATA
Distribution Statement:
Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337759

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEUTRON FLUXES FROM HIGH ALTITUDE ATOMIC EXPLOSIONS

Personal Author(s):

Latter,A L

Report Date:

19 May 1958

Media Count:

11 Page(s)

Report Number(s):

S87

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224366

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

16 May 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224052

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Method for Determining Supply Quantity for the Case of Poisson Distribution of Demand.

Report Date:

15 May 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Microfiche only after original copies exhausted.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156036

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Possible Transponding System for an Artificial Asteroid,

Report Date:
14 May 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224041
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE CHARACTER OF RESEARCH AND DEVELOPMENT IN A COMPETITIVE ECONOMY.
Personal Author(s):
Hitch,Charles
Report Date:
13 May 1958
Media Count:
13 Page(s)
Report Number(s):
P-1297
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0311418

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/311418.pdf

Size: 862 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) POSSIBLE FUTURE AIR FORCE INTERESTS IN ANTARCTICA

Descriptive Note:

Research memo.

Personal Author(s):

Ikle, Fred C

Report Date:

12 May 1958

Media Count:

27 Page(s)

Report Number(s):

RAND/RM-2197

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; MAY 1958. Other requests shall be referred to Deputy Chief of Staff, Research and Technology, USAF, Directorate of Development Planning, Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224049

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC SHORTAGES AND PRICE RISES: THE ENGINEER-SCIENTIST CASE,

Report Date:
07 May 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0311333
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/311333.pdf
Size: 2 MB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) LOGISTICS SUPPORT DURING THE PHASE-IN OF THE F-102
Descriptive Note:
Research memo.
Personal Author(s):
Stockfisch, Jacob
Report Date:
02 May 1958
Media Count:
62 Page(s)
Report Number(s):
RAND/RM-2166-PR
XC-AFRDC
Contract Number:
AF 49(638)-700
Monitor Series:
AFRDC
Report Classification:
Unclassified

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Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339900

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SIERRA PROJECT: A STUDY OF LIMITED WARS

Personal Author(s):

Paxson, E W

Report Date:

01 May 1958

Media Count:

64 Page(s)

Report Number(s):

RAND/R-317

XC-AFRDC

Contract Number:

AF 18(600)-1600

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 1958. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: RAND Project Office, Washington, DC. Restricted Data. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311429

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUPPLEMENTARY SIERRA PLANNING FACTORS.

Report Date:

01 May 1958

Media Count:

1 Page(s)

Report Number(s):

RM-2052

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224050

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On the Economic Management of Large Organizations: A Case Study in Military Logistics Involving Laboratory Simulation,

Report Date:

May 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156037

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Proposed Method for Obtaining Ductility in Beryllium by the use of a Composite Arrangement,

Report Date:

01 May 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB951487

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Management Information for the Maintenance and Operation of the Strategic Missile Force.

Descriptive Note:

Research memo.,

Personal Author(s):

Stoller,D S

Van Horn,R L

Report Date:

30 Apr 1958

Media Count:

63 Page(s)

Report Number(s):

RAND/RM-2131

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224040

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SIMPLE ECONOMICS OF BASIC SCIENTIFIC RESEARCH--A THEORETICAL ANALYSIS,

Personal Author(s):

Nelson,Richard R

Report Date:

28 Apr 1958

Media Count:

20 Page(s)

Report Number(s):

P1288

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADC061647

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A Survey of Astronautics,

Personal Author(s):

Buchheim, R W

Report Date:

26 Apr 1958

Media Count:

58 Page(s)

Report Number(s):

RAND/R-321

XC-USAF

Contract Number:

AF18(600)-1600

Monitor Series:

USAF

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156012

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) A Review of Similitude Theory in Ground Shock Problems,
Report Date:
22 Apr 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0156043
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) Outline of a Study of Extraterrestrial Base Design,
Report Date:
22 Apr 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0156011
Corporate Author:
RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Network-Flow Feasibility Theorem and Combinatorial Applications,

Report Date:

21 Apr 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338320

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME OPERATIONAL IMPLICATIONS OF SURFACE EFFECTS OF HIGH-YIELD AIR-DEFENSE WEAPONS

Personal Author(s):

Smith,R M

Report Date:

16 Apr 1958

Media Count:

29 Page(s)

Report Number(s):

RM2257

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156005

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Big Squeeze or the Utility of the Heavy Presses,

Report Date:

14 Apr 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337761

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NUCLEAR DEFENSE AGAINST SPACE WEAPONS,

Personal Author(s):

Cohen, S T

Report Date:

14 Apr 1958

Media Count:

18 Page(s)

Report Number(s):

S 84

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150686

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON LINEAR PROGRAMMING: PART XLIV. TRANSIENT FLOWS IN NETWORKS

Personal Author(s):

GALE, DAVID

Report Date:

11 Apr 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150691

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTRODUCTION TO THE AUTOMATIC FLIGHT OPERATIONS PLANNER

Personal Author(s):

JONES, WILLIAM M

SHAPIRO, MARVIN B

SHAPIRO,NORMAN

Report Date:

10 Apr 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0343412

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SECOND RAND FALLOUT MODEL: A COMPUTATIONAL TEST

Personal Author(s):

Rapp,R R

Report Date:

08 Apr 1958

Media Count:

51 Page(s)

Report Number(s):

RM2148

AFSWP-1080

Monitor Series:

1080

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224364

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

07 Apr 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311382

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/311382.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A METHOD FOR ESTIMATING DIRECT SQUADRON PERSONNEL REQUIREMENTS VIA MALFUNCTION RATES: AN APPLICATION TO THE TITAN ICBM

Descriptive Note:

Research memo.

Personal Author(s):

Voosen, Bernard

Report Date:

04 Apr 1958

Media Count:

35 Page(s)

Report Number(s):

RAND/RM-2009-1

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0303381

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METHODS OF INTERFERENCE REDUCTION IN SEARCH RADARS

Personal Author(s):

MYERS,H A

Report Date:

03 Apr 1958

Media Count:

63 Page(s)

Report Number(s):

RM-2141

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156029

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On the Computational Solution of Dynamic-Programming Processes. VII. Radar Nets,

Report Date:

03 Apr 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224363

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Japanese Views on Extraterrestrial Law and Order,

Report Date:

01 Apr 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156022

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SELF-CONTAINED RADIO INERTIAL MIDCOURSE GUIDANCE SYSTEM FOR BALLISTIC MISSILES

Descriptive Note:

Research memo.

Personal Author(s):

GARBER,T B

Report Date:

Apr 1958

Media Count:

1 Page(s)

Report Number(s):

RM2160

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337747

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECTS OF NUCLEAR EXPLOSIONS ON THE PROPAGATION OF ELECTROMAGNETIC WAVES

Descriptive Note:

Research memorandum,
Personal Author(s):
atter,R
LeLevier,R E
Report Date:
31 Mar 1958
Media Count:
84 Page(s)
Report Number(s):
RM2168
Report Classification:
SECRET
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
51 - RESTRICTED DATA
Distribution Statement:
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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0343414
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) HIGH-YIELD MISSILE SYSTEMS FOR AREA DEFENSE ADJACENT TO THE U. S.
Personal Author(s):
Carpenter,M B
Lavin,M M
Report Date:
31 Mar 1958
Media Count:
148 Page(s)
Report Number(s):
RM2167
Report Classification:
SECRET
Distribution Limitation(s):

14 - DOD ONLY; NON-DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150684

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMAL EMPLOYMENT OF TACTICAL AIR FORCES IN THEATER AIR TASKS. II: A GAME-THEORETIC ANALYSIS

Personal Author(s):

BERKOVITZ, LEONARD D

DRESHER, MELVIN

Report Date:

28 Mar 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341113

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE BASING AND OPERATION OF INTERCONTINENTAL BALLISTIC MISSILES TO 1965

Report Date:

28 Mar 1958

Media Count:

59 Page(s)

Report Number(s):

RM2136

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156030

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On the Computational Solution of Dynamic-Programming Processes-XV. An Industrial Replacement Process,

Report Date:

26 Mar 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150679

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SOVIET MILITARY POSTURE AS A REFLECTION OF SOVIET STRATEGY

Personal Author(s):

DINNERSTEIN, HERBERT S

Report Date:

24 Mar 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224044

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Theory of Hedging and Speculation in Commodity Futures,

Report Date:

13 Mar 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311469

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) POSSIBLE CIRCUMNAVIGATION OF THE EARTH WITH UNREFUELED STRATEGIC BOMBARDMENT AIRCRAFT, AND OTHER APPLICATIONS. ACHIEVEMENT OF VERY HIGH LIFT-DRAG RATIOS AT SUPERSONIC SPEEDS THROUGH DRAG TRANSFORMATION AND REDUCTION

Descriptive Note:

Research memo.

Personal Author(s):

Johnson, Roger P

Report Date:

13 Mar 1958

Media Count:

45 Page(s)

Report Number(s):

RAND/RM-2135

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133047

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME FUNDAMENTAL CONSIDERATIONS RELATING TO ADVANCED ROCKET PROPULSION SYSTEMS,

Personal Author(s):

HUTH, J H

AUGENSTEIN, B W

HOLBROOK, R D

Report Date:

11 Mar 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0221679

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DISCUSSION OF ENERGY SOURCES FOR SPACE-COMMUNICATIONS,

Personal Author(s):

Huth,J H

Report Date:

10 Mar 1958

Media Count:

25 Page(s)

Report Number(s):

P-1318

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: No Foreign.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150700

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CRITERION FOR CHOOSING SHEET TOLERANCES IN AIRCRAFT MATERIALS

Personal Author(s):

HOFFMAN,GEORGE A

Report Date:

07 Mar 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224038

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHAT'S WRONG WITH MILITARY R AND D.

Personal Author(s):

Klein,Burton

Report Date:

07 Mar 1958

Media Count:

26 Page(s)

Report Number(s):

P-1267

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224043

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRAJECTORY FUNDAMENTALS,

Report Date:

07 Mar 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: Microfiche only after original copies exhausted.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224048

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PREFACE TO U.S. POLICY TOWARD RUSSIA,

Personal Author(s):

Tucker,Robert C

Report Date:

05 Mar 1958

Media Count:

135 Page(s)

Report Number(s):

P1341

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0302831

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LOGISTIC REQUIREMENTS FOR RIOT SQUAD V/STOL FIGHTER-BOMBER AIRCRAFT OPERATIONS

Personal Author(s):

STURDEVANT,CLAYTON R

Report Date:

05 Mar 1958

Media Count:

67 Page(s)

Report Number(s):

RM-2123

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150685

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN MACHINE TRANSLATION 6: MANUAL FOR CODING RUSSIAN INFLECTIONAL GRAMMAR

Personal Author(s):

HARPER,K E

HAYS,D G

Report Date:

03 Mar 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADC065673

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Penetration Studies: The Use of Penetration Aids in Air Offense

Personal Author(s):

Bahrman, C P

Report Date:

03 Mar 1958

Media Count:

38 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution: Further dissemination only as directed by Dept. of the Air Force, Washington, DC 20330, Mar 1958, or higher DoD authority.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156006

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Cost Implications of Warhead Weight, Propellant, and Basing Concept on Air Force Intermediate and Long-Range Ballistic Missiles.

Personal Author(s):

Margolis, M A

Pardee, F S

Report Date:

Mar 1958

Media Count:

37 Page(s)

Report Number(s):

RM-2126

Contract Number:

AF33(038)-6413

Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0156035
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) DESIGN METHOD FOR CRUISE MISSILES
Personal Author(s):
WEBER,C M JR
Report Date:
Mar 1958
Media Count:
41 Page(s)
Report Number(s):
RM-2125
Contract Number:
AF33(038)-64113
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0150695
Corporate Author:
RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON THE GASDYNAMIC ASPECTS OF RE-ENTRY BODY IDENTIFICATION, INCLUDING A SUGGESTED R AND D PROGRAM

Personal Author(s):

GAZLEY,CARL JR

RAYMOND,JOSEPH L

Report Date:

Mar 1958

Media Count:

1 Page(s)

Report Number(s):

S-79

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150672

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN MACHINE TRANSLATION 1:SURVEY AND CRITIQUE

Personal Author(s):

EDMUNDSON,H P

HAYS,D G

Report Date:

25 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150678

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ICBM REQUIREMENTS FOR PROPELLANTS AND GASES AT LAUNCH SITES

Personal Author(s):

KAMINS,MILTON

ZABEL,EDWARD

Report Date:

25 Feb 1958

Media Count:

75 Page(s)

Report Number(s):

RM-2018

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224361

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTERNAL ENVIRONMENT OF MANNED SPACE VEHICLES,

Report Date:

24 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224365

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

24 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224367

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

24 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341083

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN INTRODUCTION TO ASTRONAUTICS. VOLUME I

Report Date:

24 Feb 1958

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224119

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Some Political Applications of the Space AGE.

Report Date:

24 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0221677

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AERODYNAMICS FOR SPACE FLIGHT

Personal Author(s):

GAZLEY,CARL JR

Report Date:

24 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224058

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Outer Space and International Law.

Report Date:

24 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340417

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POSSIBLE FUTUR DEVELOPMENT TRENDS IN ROCKET POWERPLANTS

Personal Author(s):

Augenstein,B W

Report Date:

24 Feb 1958

Media Count:

39 Page(s)

Report Number(s):

S83

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224057

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Interplanetary Exploration.

Report Date:

24 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338639

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN INTRODUCTION TO ASTRONAUTICS. VOLUME 2

Report Date:

24 Feb 1958

Media Count:

414 Page(s)

Report Number(s):

S-72

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

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02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224265

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Space Environment,

Report Date:

24 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224266

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Orinetation and Control,

Report Date:

24 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341112

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) An Appraisal of Oro's Defense Study, R-17.

Personal Author(s):

Wholstetter,Albert

Report Date:

21 Feb 1958

Media Count:

1 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0606032

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ROLE OF SCIENCE IN MODERN WARFARE,

Personal Author(s):

Pokrovskii,G I

Report Date:

21 Feb 1958

Media Count:

8 Page(s)

Report Number(s):

T-80

TT-64 71433

Monitor Series:

64 71433

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC Users Only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156039

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Theory of the Solar Aureole. Part II. Applications to Atmospheric Models,

Report Date:

20 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224389

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A FAILURE MODEL FOR EQUIPMENTS UNDERGOING COMPLEX OPERATION,

Personal Author(s):

Stoller,David S

Report Date:

18 Feb 1958

Media Count:

7 Page(s)

Report Number(s):

P-929

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224045

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Foundations and Advances in Game Theory,

Report Date:

14 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: Microfiche only after original copies exhausted.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224039

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Science and Doctrine in the Soviet Union,

Report Date:

14 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0210222

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TWO METHODS OF OBTAINING EARTH SATELLITE POSITIONS FROM SIMPLE PHOTOGRAPHIC
OBSERVATIONS

Personal Author(s):

SQUIRES,W K

Report Date:

12 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338562

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CORRELATION OF SHIELD WEIGHTS FOR USE IN PRO PULSION SYSTEM FEASIBILITY STUDIES

Personal Author(s):

Pinkel,B

Kirkwood,AND T F

Report Date:

12 Feb 1958

Media Count:

27 Page(s)

Report Number(s):

S80

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311468

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN OPERATIONAL CONCEPT FOR THE SM-73 MISSILE ('MOTHER GOOSE')

Descriptive Note:

Research memo.

Personal Author(s):

Jenkins, J L

Report Date:

10 Feb 1958

Media Count:

46 Page(s)

Report Number(s):

RAND/RM-2112

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; FEB 1958. Other requests shall be referred to Hqs. USAF, Directorate of Development Planning, Attn: AFRDP/Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224653

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Air Force Logistics - from Research to Policy,

Report Date:

07 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311930

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ACTIVE AIR DEFENSE IN A SPECIFIC PERIPHERAL WAR ENVIRONMENT,

Personal Author(s):

Rosen,J H

Report Date:

06 Feb 1958

Media Count:

73 Page(s)

Report Number(s):

RM2111

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0231242

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIFT OF SLENDER NOSE SHAPES ACCORDING TO NEWTONIAN THEORY

Personal Author(s):

COLE,J D

Report Date:

04 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224027

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Economic Problem in Air force Logistics,

Report Date:

04 Feb 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156015

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BOMB ALARM SYSTEM

Personal Author(s):

CARNE,J B

CULVER,W H

Report Date:

03 Feb 1958

Media Count:

51 Page(s)

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340960

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DISPERSAL OF OUR PLANNED ICBM FORCE

Report Date:

31 Jan 1958

Media Count:

39 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

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23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224358

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUTURE PROSPECTS FOR SOVIET ECONOMIC AID.

Personal Author(s):

Heymann,Hans , Jr

Report Date:

31 Jan 1958

Media Count:

17 Page(s)

Report Number(s):

P-1269

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0150658
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) NOTE ON THE SR90 HAZARD
Personal Author(s):
LATTER,ALBERT L
PLESSET,MILTON S
Report Date:
31 Jan 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0342741
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) BLAST SHELTER FOR OUR PLANNED ICBM FORCE
Report Date:
31 Jan 1958
Media Count:
42 Page(s)
Report Number(s):
XC-AFRDC
Monitor Series:
AFRDC
Report Classification:
SECRET
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02 - U.S. GOVT. AND THEIR CONTRACTORS

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244728

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LUNAR FLIGHT TRAJECTORIES

Personal Author(s):

BUCHHEIM,R W

Report Date:

30 Jan 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150683

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EVOLUTION AND NATURE OF THE LUNAR ATMOSPHERE

Personal Author(s):

VESTINE,E H

Report Date:

29 Jan 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224355

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Efficient Transportation and Industrial Location,

Personal Author(s):

Goldman, Thomas A

Report Date:

28 Jan 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

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Availability: Reference only; can be viewed at DTIC only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224028

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Experimentation by Simulation and Monte Carlo,

Report Date:

28 Jan 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150688

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A STRATEGIC AIR WAR PLANNING GAME

Personal Author(s):

HELMER,OLAF

SHAPLEY,LLOYD

Report Date:

27 Jan 1958

Media Count:

72 Page(s)

Report Number(s):

RM-2105

Contract Number:

AF33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0244750
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON COMMUNICATION PROCESSES INVOLVING LEARNING AND RANDOM DURATION
Personal Author(s):
BELLMAN,RICHARD
KALABA,ROBERT
Report Date:
23 Jan 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0144307
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) RELATIVE VELOCITY OF ICBM WARHEADS AND EJECTED DECOYS
Personal Author(s):
FRICK, R H

TAMARKIN, P

Report Date:

17 Jan 1958

Media Count:

37 Page(s)

Report Number(s):

RM-2103

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0158407

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME ASPECTS OF THE MATHEMATICAL THEORY OF CONTROL PROCESSES

Personal Author(s):

BELLMAN,R E

GLICKSBERG,I

GROSS,O A

Report Date:

16 Jan 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0205873

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HYDROGENIC BOUND-FREE GAUNT FACTORS

Personal Author(s):

KARZAS,W J

LATTER,R

Report Date:

15 Jan 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339870

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Project Rand Program.

Descriptive Note:

Staff rept.

Report Date:

15 Jan 1958

Media Count:

47 Page(s)

Report Number(s):

R314

Contract Number:

AF18 600 1600

Report Classification:

SECRET

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51 - RESTRICTED DATA

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144297

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SAVINGS FROM PROCUREMENT DEFERRAL WITH INTERIM CONTRACTOR SUPPORT: THE CASE OF
HIGH VALUE AIRFRAME SPARES

Personal Author(s):

PETERSEN,JAMES W

Report Date:

10 Jan 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224037

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Economics and Military Operations Research,

Report Date:

08 Jan 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224359

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PROPOSED STAGewise DIFFERENTIAL CORRECTION PROCEDURE FOR SATELLITE TRACKING AND PREDICTION,

Report Date:

08 Jan 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224036

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Lunar Flight,
Report Date:
07 Jan 1958
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0156013
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) TROPOSPHERIC PROPAGATION ERRORS IN LONG-RANGE BALLISTIC MISSILE GUIDANCE
Personal Author(s):
CRAIN,CULLEN M
Report Date:
07 Jan 1958
Media Count:
40 Page(s)
Report Number(s):
RM-2084
Contract Number:
AF 33(038)6413
Report Classification:
Unclassified
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED
Distribution Statement:
Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156041

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MANPOWER AND EQUIPMENT ESTIMATORS FOR AUSTERE OPERATION OF V/STOL AIRCRAFT IN A LOCAL-WAR ENVIRONMENT (1965-1970)

Personal Author(s):

WILSON,JAMES A

Report Date:

06 Jan 1958

Media Count:

23 Page(s)

Report Number(s):

RM-2081

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0211641

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF RANDOM AND PERIODIC DATA SAMPLING FOR THE DETECTION OF SIGNALS IN NOISE,

Personal Author(s):

MIDDLETON,DAVID

Report Date:

04 Jan 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0205422

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Lunar Base Study Jury Report Evaluation Of An Experiment In Creative Design Conducted With College Students,

Personal Author(s):

HOLBROOK, R D

LANG, H A

HUNTZICKER, J H

Report Date:

01 Jan 1958

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0150677
Corporate Author:
RAND CORP SANTA MONICA CALIF
Personal Author(s):
KIRKWOOD,R L
Report Date:
Jan 1958
Media Count:
1 Page(s)
Report Number(s):
RM-2094
Contract Number:
AF 33(038)6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0156009
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Statistical Problems in Infrared Search Systems.
Personal Author(s):
Genoud,R H
Report Date:
Jan 1958
Media Count:
27 Page(s)
Report Number(s):
RM-2083
Contract Number:
AF 33(038)-6413
Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150681

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PRODUCTION OF AERODYNAMIC FORCES BY HEAT ADDITON ON EXTERNAL SUREFACES OF AIRCRAFT

Personal Author(s):

WILMARTH,W W

Report Date:

30 Dec 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224035

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GLOSSARY OF RUSSIAN PHYSICS ON PUNCHED CARDS,

Report Date:

26 Dec 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144294

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET ADMINISTRATIVE CONTROLS DURING THE SIEGE OF LENINGRAD

Personal Author(s):

GOURE, LEON

Report Date:

23 Dec 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144309

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A METHOD FOR EVALUATING ENVIRONMENTAL EFFECTS ON MILITARY OPERATIONS

Personal Author(s):

SARTOR, J D

Report Date:

21 Dec 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144287

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXPERIMENTAL DESIGN AND EVALUATION OF AN F-86H FLYAWAY KIT

Personal Author(s):

FORT,DONALD

Report Date:

18 Dec 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150666

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN MACHINE TRANSLATION 2:RESEARCH METHODOLOGY

Personal Author(s):

EDMUNDSON,H P

HAYS,D G

Report Date:

16 Dec 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150668

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN MACHINE TRANSLATION,5:MANUAL FOR KEYPUNCHING RUSSIAN SCIENTIFIC TEXT

Personal Author(s):

EDMUNDSON,H P

HAYS,D G

Report Date:

13 Dec 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144306

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BRIEF DESCRIPTION OF THE SWAP GAME

Personal Author(s):

HELMER,OLAP

SHAPLEY,LLOYD

Report Date:

12 Dec 1957

Media Count:

16 Page(s)

Report Number(s):

RM-2058

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144303

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DIRECT POWER CONVERSION, PART II. THE FISSION-ELECTRIC REACTOR

Personal Author(s):

SAFONOV,GEORGE

Report Date:

12 Dec 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144286

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A STUDY OF RE-ENTRY DECOYS FOR USE WITH ICBM OFFENSE

Personal Author(s):

RAYMOND, J L

GAZLEY, C JR

Report Date:

12 Dec 1957

Media Count:

33 Page(s)

Report Number(s):

RM2059

Contract Number:

AF 33(038)6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311467

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE BRITISH BLUE JAY (FIRESTREAK) MISSILE, CURRENT STATUS

Descriptive Note:

Research memo.

Personal Author(s):

Ballard, S S

Report Date:

07 Dec 1957

Media Count:

15 Page(s)

Report Number(s):

RAND/RM-2070

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; DEC 1957. Other requests shall be referred to Hqs. USAF, Directorate of Development Planning, Attn: AFRDP/Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156019

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Soviet Role in International Civil Aviation,

Report Date:

04 Dec 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150661

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON LINEAR PROGRAMMING:PARTXLII LINEAR PROGRAMMING AND STRUCTURAL DESIGN

Personal Author(s):

PRAGER,WILLIAM

Report Date:

03 Dec 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150652

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VTOL-STOL TURBOPROP ENGINE THRUST REQUIREMENTS AS AFFECTED BY TEMPERATURE AND ELEVATION IN SOUTHERN ASIA

Personal Author(s):

WILSON,JAMES A

Report Date:

Dec 1957

Media Count:

26 Page(s)

Report Number(s):

RM-2055

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338845

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Monte Carlo calculation of Neutron fluxes from Teapot HA Shot

Descriptive Note:

Research memo.

Personal Author(s):

Latter, A L

Marcum, J I

Report Date:

01 Dec 1957

Media Count:

54 Page(s)

Report Number(s):

RM-2121

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 01 DEC 1957. Other requests shall be referred to Deputy Chief of Staff for Research and Development, Department of the Air Force, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311431

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CHINA-5: CAMPAIGNS,

Personal Author(s):

Paxson, E W

Johnson, R H

Jones, W M

Peterson, A H

Shoop, R R

Report Date:

01 Dec 1957

Media Count:

232 Page(s)

Report Number(s):

RM2073

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Distribution: No Forn. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311428

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CHINA-5: SUMMARY.

Descriptive Note:

Research memo.

Personal Author(s):

Paxson, E W

Johnson, R H

Peterson, A H

Report Date:

01 Dec 1957

Media Count:

106 Page(s)

Report Number(s):

RAND/RM-2072

XD-XD

Monitor Series:

XD

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Specific Authority; 29 Nov 99.
Other requests shall be referred to DTIC-BRR, 8725 John J. Kingman Rd. Ste 0944, Ft Belvoir, VA 22060-6218.,

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150669

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF A NOVEL METHOD OF UTILIZING BORON-BASED HIGH-ENERGY FUELS

Personal Author(s):

PINKEL,B

DOLE,S H

WECHALER,J W

Report Date:

Dec 1957

Media Count:

1 Page(s)

Report Number(s):

RM-2089

Contract Number:

AF33(038)-6413

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311430

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CHINA-5: METHODOLOGY,

Personal Author(s):

Paxson ,E W

Johnson ,R H

Jones ,W M

Peterson ,A H

Rumsey,R W

Report Date:

01 Dec 1957

Media Count:

144 Page(s)

Report Number(s):

RM2074

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Distribution: Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150693

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Nuclear Blast Wave Calculations including Thermal Losses.

Descriptive Note:

Research memo.,

Personal Author(s):

Brode, H L

Report Date:

Dec 1957

Media Count:

72 Page(s)

Report Number(s):

RAND/RM-2076

XC-USAF

Contract Number:

AF33(038)-6413

Monitor Series:

USAF

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

DoD Controlling Organization: U.S. Dept. of the Air Force, Public Affairs Office, STINFO/Librarian,
Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144301

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) QUICK REFERENCE BOMBING CHARTS A SET OF SIMPLIFIED BLAST-DAMAGE CHARTS FOR VARIOUS
KINDS OF TARGETS

Personal Author(s):

BAILEY, H H

Report Date:

Dec 1957

Media Count:

10 Page(s)

Report Number(s):

RM-2071

Contract Number:

AF33(038)-6413

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED
52 - FORMERLY RESTRICTED DATA

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0150697
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) TELEVISION-INERTIAL GUIDANCE FOR CRUISE MISSILES
Descriptive Note:
Research memo.
Personal Author(s):
GORDON,G
HUTCHESON,J H
SMITH,F T
Report Date:
27 Nov 1957
Media Count:
128 Page(s)
Report Number(s):
RM-2020
Contract Number:
AF 33(038)6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0338010

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRELIMINARY DISCUSSION OF DECOY PRINCIPLES INCLUDING ECM AND BOMB PAYLOADS

Personal Author(s):

Culp, C R

Firstman, S I

Report Date:

23 Nov 1957

Media Count:

115 Page(s)

Report Number(s):

RM2017

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224032

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USE OF GAMING AND SIMULATION DEVICES IN BUSINESS,

Personal Author(s):

Steger, Wilbur A

Report Date:

20 Nov 1957

Media Count:

6 Page(s)

Report Number(s):

P1219

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150696

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MANPOWER, EQUIPMENT, AND MODE OF OPERATIONS FOR A CRUISE MISSILE SYSTEM, 1965-1970

Descriptive Note:

Research memo.

Personal Author(s):

DUDLEY,V S

Report Date:

15 Nov 1957

Media Count:

35 Page(s)

Report Number(s):

RM2015

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144298

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELECTRONIC DATA PROCESSING CONTROL OF AIR FORCE SPARE PARTS INVENTORIES

Personal Author(s):

POLLACK,S L

Report Date:

14 Nov 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150667

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CORRELATION OF WING-BODY DRAG-DUE-TO-LIFT AT SUPERSONIC SPEEDS FOR USE IN AIRPLANE
DESIGN STUDIES

Descriptive Note:

Research memo.

Personal Author(s):

BLAKESLEE, D J

Report Date:

11 Nov 1957

Media Count:

67 Page(s)

Report Number(s):

RM-2014

XC-AFRDC

Contract Number:

AF 33(038)-6413

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff Research and Development (AF), Directorate of Operational Requirements and Development Plans, Attn: Project Rand Office, Washington, DC 20330.,

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224024

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MATHEMATICS OF MILITARY PAY,

Personal Author(s):

Enthoven,Alain C

Report Date:

11 Nov 1957

Media Count:

30 Page(s)

Report Number(s):

P1100

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150689

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BEHIND THE SPUTNIKS. A SURVEY OF SOVIET SPACE SCIENCE

Personal Author(s):

KRIEGER, F J

Report Date:

03 Nov 1957

Media Count:

308 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: No Forn. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150653

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

EMERSON,D E

STILLMAN,W P

Report Date:

Nov 1957

Media Count:

46 Page(s)

Report Number(s):

RM-2016

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311462

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) WS-110A AERODYNAMICS STATE-OF-THE-ART: A REVIEW AND A PROJECTION

Descriptive Note:

Research memo.

Personal Author(s):

Johnson, Roger P

Report Date:

01 Nov 1957

Media Count:

55 Page(s)

Report Number(s):

RAND/RM-2022

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; NOV 1957. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150665

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RATE OF FALL THROUGH THE ATMOSPHERE OF IRREGULARLY SHAPED PARTICLES

Personal Author(s):

RAPP,R R

SARTOR,J D

Report Date:

01 Nov 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311331

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/311331.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME IMPLICATIONS FOR U.S. NATIONAL SECURITY OF ACTIVITIES IN OUTER SPACE.

Descriptive Note:

Interim rept.,

Personal Author(s):

Goldsen, Joseph M

Lipson, Leon S

Report Date:

28 Oct 1957

Media Count:

78 Page(s)

Report Number(s):

RM-2004

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't Agencies only. Specific Authority; Oct 28, 1969. Other requests shall be referred to DCS Development, Hq USAF, Washington, DC., Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224967

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TWO RUSSIAN ARTICLES ON THE BALLISTIC MISSILE.

Personal Author(s):

Dinerstein,H S

Report Date:

15 Oct 1957

Media Count:

9 Page(s)

Report Number(s):

T77

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133048

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LOGISTICS LABORATORY PROBLEM I AFTER TWO (SIMULATED) YEARS

Personal Author(s):

ENKE,STEPHEN

Report Date:

10 Oct 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224020

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Chemical Equilibrium in Complex Mixtures,

Report Date:

08 Oct 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144282

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THEORY OF THE SOLAR AUREOLE PART I: SCATTERING AND RADIATIVE TRANSFER

Personal Author(s):

DEIRMENDJIAN,DIRAN

Report Date:

03 Oct 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144284

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SWEEPBACK THEORY FOR SHOCK WAVES AT HYPERSONIC SPEEDS

Personal Author(s):

COLE,J D

Report Date:

02 Oct 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144267

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DIRECT POWER CONVERSION: PART I. GENERAL COMMENTS

Personal Author(s):

HUTH,J H

Report Date:

Oct 1957

Media Count:

10 Page(s)

Report Number(s):

S-68

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144304

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LUNAR INSTRUMENT CARRIER-LAUNCH TIME TOLERANCE

Personal Author(s):

LIESKE,H A

Report Date:

Oct 1957

Media Count:

29 Page(s)

Report Number(s):

RM1994

Contract Number:

AF33 (038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144268

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BRIEF STUDY OF THE MAINTENANCE OF B-52 AIRCRAFT HOUSED IN UNDERGROUND SHELTERS

Personal Author(s):

JENKINS,J L

Report Date:

Oct 1957

Media Count:

31 Page(s)

Report Number(s):

RM2001

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144310

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FORWARD BASE CONSTRUCTION FOR V/STOL AIRCRAFT

Personal Author(s):

REINHARDT,G C

Report Date:

Oct 1957

Media Count:

33 Page(s)

Report Number(s):

RM-1996

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144300

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FEASIBILITY OF HEF IN FUTURE STRATEGIC WEAPON SYSTEMS

Personal Author(s):

DOLE,S H

Report Date:
Oct 1957
Media Count:
53 Page(s)
Report Number(s):
RM-1989
Report Classification:
Unclassified
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED
Distribution Statement:
Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0144308
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) LOCAL SECURITY PROBLEMS OF V/STOL SITES
Personal Author(s):
REINHARDT,G C
Report Date:
Oct 1957
Media Count:
13 Page(s)
Report Number(s):
RM-1999
Contract Number:
AF 33(038)6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150682

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CHARACTERISTICS OF A FAMILY OF TILT-WING VTOL TRANSPORT AIRCRAFT

Personal Author(s):

SMITH, G K

Report Date:

Oct 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224356

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUPPLY AND DEMAND AND MILITARY PAY.

Personal Author(s):

Enthoven,Alain C

Report Date:

30 Sep 1957

Media Count:

14 Page(s)

Report Number(s):

P-1186

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150662

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CLOSE-IN FALLOUT

Report Date:

30 Sep 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224031

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Concept of Stability in Manpower Planning,

Report Date:

27 Sep 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144288

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/144288.pdf

Size: 525 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) On The Strength of Fine Wires

Descriptive Note:

Research memo.

Personal Author(s):

Shanley, F R

Report Date:

26 Sep 1957

Media Count:

20 Page(s)

Report Number(s):

RAND-RM-2011

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Specific Authority; 24 Nov 99.

Other requests shall be referred to DTIC-BRR, 8725 John J. Kingman Rd. ste 0944, Ft. Belvior, VA 22060-6218

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311460

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SPECULATIONS ON SPACE WEAPONS - 1957

Descriptive Note:

Research memo.

Personal Author(s):

Buchheim, R W

Report Date:

26 Sep 1957

Media Count:

30 Page(s)

Report Number(s):

RAND/RM-2002

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Hqs., US Air Force, USAF/RDQA, Attn: Project RAND Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133049

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) "CONTRADICTIONS" IN THE MOSCOW-PEKING AXIS

Personal Author(s):

WHITING,ALLEN S

Report Date:

24 Sep 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133033

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF CONSTRUCTION COSTS IN THE USSR AND US

Personal Author(s):

KAPLAN,NORMAN M

Report Date:

23 Sep 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0303611

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TARGET POSITION AND VELOCITY FROM ANGLE-ONLY MEASUREMENTS, WITH APPLICATIONS TO
ICBM PATH PREDICTION

Descriptive Note:

Research memo.,

Personal Author(s):

GABLER,R T

O'MARA,H R

Report Date:

18 Sep 1957

Media Count:

57 Page(s)

Report Number(s):

RM-1982

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224029

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Criteria of Efficiency in Government Expenditures,

Report Date:

18 Sep 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341110

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESTIMATES OF THE THERMAL RADIATION FROM NUCLEAR WEAPONS BURST AT HIGH ALTITUDES

Personal Author(s):

Brode,Harold L

Gilmore,Forrest R

Report Date:

18 Sep 1957

Media Count:

23 Page(s)

Report Number(s):

RM1983

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144279

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON LINEAR PROGRAMMING: PART XLI. CONSTRUCTING MAXIMAL DYNAMIC FLOWS FROM
STATIC FLOWS

Personal Author(s):

FORD,L R JR

FULKERSON,D R

Report Date:

17 Sep 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224354

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ECONOMIST LOOKS AT AIR FORCE LOGISTICS,

Personal Author(s):

Enke,Stephen

Report Date:

17 Sep 1957

Media Count:

29 Page(s)

Report Number(s):

P1179

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311330

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/311330.pdf

Size: 873 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TRAVEL AND DISPERSION OF BALLOONS AT HIGH ALTITUDES

Descriptive Note:

Research memo.

Personal Author(s):

Rapp, R R

Report Date:

17 Sep 1957

Media Count:

23 Page(s)

Report Number(s):

RAND/RM-1980

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; SEP 1957. Other requests shall be referred to Deputy Chief of Staff, Research and Technology, USAF, Directorate of Development Planning, Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144278

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON LINEAR PROGRAMMING: PART XLIII. A FEASIBILITY ALGORITHM FOR ONE-WAY
SUBSTITUTION IN PROCESS ANALYSIS

Personal Author(s):

ARROW,KENNETH J

JOHNSON,SELMER M

Report Date:

12 Sep 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144263

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NETWORK FLOW AND SYSTEMS OF REPRESENTATIVES

Personal Author(s):

FORD,L R JR

FULKERSON,D R

Report Date:

12 Sep 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150654

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) STRONG-SHOCK POINT-SOURCE BLAST WAVE IN A NON-UNIFORM ATMOSPHERE

Personal Author(s):

AUSTERN, NORMAN

Report Date:

09 Sep 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311422

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/311422.pdf

Size: 753 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME SAFETY ASPECTS OF PEACETIME LAUNCHINGS OF OPERATIONAL BALLISTIC MISSILES

Descriptive Note:

Research memo.

Personal Author(s):

Jackson, Victor G

Report Date:

05 Sep 1957

Media Count:

25 Page(s)

Report Number(s):

RAND/RM-1975

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; SEP 1957. Other requests shall be referred to Deputy Chief of Staff, Research and Technology, USAF, Directorate of Development Planning, AFRDP, Project Rand Office, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150675

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A VULNERABILITY MODEL FOR WEAPON SITES WITH INTERDEPENDENT ELEMENTS

Personal Author(s):

FIRSTMAN,SIDNEY I

Report Date:

04 Sep 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150699

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SYSTEMATIC APPROACH TO A CLASS OF PROBLEMS IN THE THEORY OF NOISE AND OTHER
RANDOM PHENOMENA

Personal Author(s):

SIEGERT,A J F

DARLING,D A

Report Date:

04 Sep 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0206491

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/206491.pdf

Size: 10 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THEORETICAL SOLUTIONS OF SPHERICAL SHOCK TUBE BLASTS

Personal Author(s):

BRODE, HAROLD L

Report Date:

04 Sep 1957

Media Count:

79 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 4 Sep 1957. Other requests shall be referred to the Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330., Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144265

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EJECTION VELOCITY REQUIREMENTS FOR ICBM DECOYS

Personal Author(s):

FRICK, R H

Report Date:

Sep 1957

Media Count:

25 Page(s)
Report Number(s):
RM-1987
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0133042
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A PRELIMINARY INVESTIGATION OF ICBM MIDCOURSE GUIDANCE
Personal Author(s):
GARBER,T B
Report Date:
Sep 1957
Media Count:
45 Page(s)
Report Number(s):
RM-1970
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133050

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WINGTIP COUPLING, A METHOD OF RANGE EXTENSION FOR CRUISE-DASH AIRCRAFT

Personal Author(s):

KRASE,W H

Report Date:

Sep 1957

Media Count:

13 Page(s)

Report Number(s):

RM-1988

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144283

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECT OF DESIGN TAKE-OFF DISTANCE ON THE WEIGHT-RANGE CHARACTERISTICS OF SHORT AND VERTICAL TAKE-OFF FIGHTER-BOMBER AIRCRAFT

Personal Author(s):

SMITH,G K

BLAKESLEE,D J

Report Date:

Sep 1957

Media Count:

41 Page(s)

Report Number(s):

RM-1984

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144296

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OUTLINE OF A STUDY OF MANNED SPACE FLIGHT

Personal Author(s):

BUCHHEIM, R W

Report Date:

Sep 1957

Media Count:

35 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0158074

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE BERLIN BLOCKADE. A STUDY IN COLD WAR POLITICS

Personal Author(s):

DAVISON, W PHILLIPS

Report Date:

01 Sep 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156008

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Drag Transformation and Reduction for Bodies of Revolution,

Report Date:

30 Aug 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150687

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE STABILITY OF FLOW IN THE BOUDARY LAYER NEAR THE NOSE OF A BLUNT BODY

Personal Author(s):

KUETHE,A M

Report Date:

28 Aug 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0245193

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ATMOSPHERIC TRANSPORT AND CLOSE-IN FALLOUT OF RADIOACTIVE DEBRIS FROM ATOMIC EXPLOSIONS

Personal Author(s):

KELLOGG,W W

Report Date:

26 Aug 1957

Media Count:

40 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311329

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/311329.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) FIRING CAPABILITIES VERSUS FIRING OBJECTIVES FOR THE ATLAS ICBM

Personal Author(s):

Voosen, B J

Zabel, Edward

Stoller, D S

Report Date:

26 Aug 1957

Media Count:

109 Page(s)

Report Number(s):

RAND-RM-1920

XC-USAF

Contract Number:

AF 49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; 20 Aug 1957. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of Staff, Research and Technology, Hq., USAF, Washington, DC., Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311459

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MANPOWER AND COST IMPLICATIONS OF AN AIR FORCE-WIDE STATE OF READINESS

Personal Author(s):

Sanchez, L R

Springer, J Y

Report Date:

23 Aug 1957

Media Count:

50 Page(s)

Report Number(s):

RAND/RM-1966

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; AUG 1957. Other requests shall be referred to Hqs. USAF, Director of Development Planning, Attn: AFRDP/RAND, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133040

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE INTENSE STRESS FIELD PRODUCED IN THE ELASTIC EARTH BY A BOMB BLAST AT THE SURFACE

Personal Author(s):

SERBIN, HYMAN

Report Date:

23 Aug 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144302

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/144302.pdf

Size: 7 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A CALCULATION OF THE BLAST WAVE FROM A SPHERICAL CHARGE OF TNT

Personal Author(s):

Brode, Harold L

Report Date:

21 Aug 1957

Media Count:

65 Page(s)

Report Number(s):

RAND-RM-1965

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 21 Aug 1957. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330., Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133044

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RESOLUTION OF REAL-COEFFICIENT POLYNOMIALS IN CONTROL SYSTEM ANALYSIS

Personal Author(s):

SHIELDS,W R

Report Date:

20 Aug 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244731

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A New Model of the Atmosphere and Ionosphere,

Personal Author(s):

KALLMANN,H KORF

Report Date:

19 Aug 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224026

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) General Equilibrium for Linear Models,

Report Date:

15 Aug 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341376

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLE ANALYTICAL APPROXIMATION TO SPHERICAL SHOCK OVERPRESSURES VERSUS DISTANCE,
IN THE RANGE 1-1000 PSI, FOR A HOMOGENEOUS ATMOSPHERE

Personal Author(s):

Augenstein,B W

Report Date:

15 Aug 1957

Media Count:

7 Page(s)

Report Number(s):

RM1968

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133046

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DESIGN PROCEDURES AND DATA FOR SANDWICH PANEL TESTS

Personal Author(s):

KAECHELE,L E

Report Date:

13 Aug 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0221674

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE STRUCTURAL EXPLOITATION OF THE STRENGTH OF WHISKERS

Personal Author(s):

HOFFMAN,GEORGE A

Report Date:

06 Aug 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133045

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MAINTENANCE-OPERATIONS INTERACTIONS AT BASE LEVEL

Personal Author(s):

SEWELL, WADE P

Report Date:

01 Aug 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150674

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A RADAR DIRECTORY

Personal Author(s):

SOLTWEDEL,E B

Report Date:

Aug 1957

Media Count:

111 Page(s)

Report Number(s):

RM-2000

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150657

Corporate Author:
RAND CORP SANTA MONICA CALIF
Personal Author(s):
KRASE,W H
Report Date:
Aug 1957
Media Count:
37 Page(s)
Report Number(s):
RM-2003
Contract Number:
AF33(038)-6413
Report Classification:
SECRET
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0144280
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) RADAR CAMOUFLAGE
Personal Author(s):
HOFFMAN,W C
Report Date:
Aug 1957
Media Count:
43 Page(s)
Report Number(s):
RM-1838
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224353

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Factor Productivity and Economic Growth,

Report Date:

01 Aug 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224025

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Dynamic Programming and the Reliability of Multi-Component Devices,

Report Date:

31 Jul 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0157617

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STRATEGIC SURRENDER. THE POLITICS OF VICTORY AND DEFEAT

Personal Author(s):

KECSKEMETI,PAUL

Report Date:

26 Jul 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133027

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POLITICAL TRENDS IN THE HUNGARIAN ARMY, 1945-1956

Personal Author(s):

SZENT-MIKLOS,ISTVAN

Report Date:

23 Jul 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133024

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) KHRUSHCHEV AND THE POLITICAL CRISIS OF JUNE, 1957

Personal Author(s):

RUSH, MYRON

Report Date:

23 Jul 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Microfiche copies only. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133020

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CHANGING PATTERN OF SOVIET FOREIGN POLICY

Personal Author(s):

TUCKER,ROBERT C

Report Date:

23 Jul 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133039

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/133039.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NUCLEAR WEAPONS PHENOMENA PERTINENT TO PROTECTIVE DESIGN

Descriptive Note:

Research memo.

Personal Author(s):

BRODE, HAROLD L

Report Date:

19 Jul 1957

Media Count:

49 Page(s)

Report Number(s):

RM-1938

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133037

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXPERIENCE WITH THE MANAGEMENT-DECISION SIMULATION GAME, MONOPOLOGS

Personal Author(s):

REHKOP,JEAN

Report Date:

17 Jul 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133023

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MOMENTS OF TWO DISTRIBUTION-FREE STATISTICS OF SMIRNOV

Personal Author(s):

EDMUNDSON,H P

Report Date:

15 Jul 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311458

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A CONSIDERATION OF THE EFFECTS OF SPEED AND ALTITUDE ON BOMBER SURVIVAL AND UTILITY

Descriptive Note:

Research memo.

Personal Author(s):

Culp, C R

Davis, R A

Wakeley, J T

Report Date:

15 Jul 1957

Media Count:

44 Page(s)

Report Number(s):

RAND/RM-1951

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; JUL 1957. Other requests shall be referred to Hqs. USAF, Director of Development Planning, Attn: AFRDP/RAND, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0231169

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FIELD INVESTIGATIONS ON SOUTHAMPTON ISLAND AND AROUND WAGER BAY, NORTHWEST TERRITORIES, CANADA

Personal Author(s):

BRONHOFER,MAX

Report Date:

15 Jul 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337992

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) URBAN BLAST DAMAGE, WEAPON YIELDS, AND DELIVERY ACCURACIES

Personal Author(s):
Hanunian, Norman
Report Date:
15 Jul 1957
Media Count:
322 Page(s)
Report Number(s):
RM1671
Report Classification:
SECRET
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
51 - RESTRICTED DATA
Distribution Statement:
Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0133034
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) PRELIMINARY CONSIDERATIONS OF A CAMOUFLAGED ICBM RE-ENTRY BODY.
Personal Author(s):
GAZLEY, C JR
TATUM, F A
KAECHLE, L E
Report Date:
11 Jul 1957
Media Count:
25 Page(s)
Report Number(s):
RM-1940
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133008

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UTILIZATION OF A MOON-ROCKET SYSTEM FOR MEASUREMENT OF THE LUNAR MAGNETIC FIELD

Personal Author(s):

VESTINE,E H

Report Date:

09 Jul 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356174

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FRACTION OF REDWING RADIOACTIVITY IN LOCAL FALLOUT

Personal Author(s):

Tucker,B L

Report Date:

09 Jul 1957

Media Count:

13 Page(s)

Report Number(s):

RM1932

DASA-1053

Monitor Series:

1053

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified requesters shall obtain release approval from Director of Planning, AFRDF, USAF, Wash. 25, D. C. Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133017

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FULLY CAVITATING HYDROFOILS IN NONSTEADY MOTION

Personal Author(s):

PARKIN, BLAINE R

Report Date:

08 Jul 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133019

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN OPERATIONAL FREQUENCY COORDINATING SYSTEM

Personal Author(s):

LUSTGARTEN,M N

Report Date:

Jul 1957

Media Count:

71 Page(s)

Report Number(s):

RM-1910

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0158409

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXTERNALLY MODERATED REACTORS

Personal Author(s):

SAFONOV,G

Report Date:

Jul 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

DTIC DOES NOT HAVE THIS ITEM

Accession Number:

AD0224017

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPERATIONS RESEARCH -- A NEW SCIENCE.

Personal Author(s):

Hoag,Malcolm W

Report Date:

Jul 1957

Media Count:

10 Page(s)

Report Number(s):

P1030

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

21 - JOURNAL ARTICLES ANNOUNCEMENT ONLY

DTIC DOES NOT HAVE THIS ITEM

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338039

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Some Technical Aspects of High-frequency Radio Blackout by Nuclear Clouds.

Personal Author(s):

Hoffman, W C

Report Date:

01 Jul 1957

Media Count:

42 Page(s)

Report Number(s):

RM-1931

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340126

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) FURTHER RESULTS OF NEUTRON TRANSPORT IN THE ATMOSPHERE (SUNLAMP)

Descriptive Note:

Research memo.

Personal Author(s):

Latter, A L

Marcum, J I

Report Date:

28 Jun 1957

Media Count:

29 Page(s)

Report Number(s):

RAND-RM-1928

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 28 JUN 1957. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224352

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE GRAPHICAL INTEGRATION OF THE ONE-PARAMETER MODEL WITH TERRAIN EFFECTS,

Personal Author(s):

Knox, Joseph B

Report Date:

25 Jun 1957

Media Count:

33 Page(s)

Report Number(s):

P-1107

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133003

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE REVOLUTION IN SOVIET STRATEGIC THINKING

Personal Author(s):

DINERSTEIN,HERBERT S

Report Date:

24 Jun 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116561

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A RECONNAISSANCE MODEL

Personal Author(s):

SNOW,R N

MENGEL,A S

Report Date:

24 Jun 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133018

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CASEBOOK ON SOVIET ASTRONAUTICS. PART II

Descriptive Note:

Research memo,

Personal Author(s):

KRIEGER,F J

Report Date:

21 Jun 1957

Media Count:

203 Page(s)

Report Number(s):

RM-1922

Contract Number:

AF33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133016

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRODUCTION CHARACTERISTICS OF HI-VALU AIRFRAME SPARE PARTS

Personal Author(s):

REHKOP,A JEAN

Report Date:

19 Jun 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144262

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Prices of Basic Industrial Goods in the USSR, 1950 to 1956.

Report Date:

12 Jun 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337745

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Extreme-Yield Thermonuclear Weapons for Continental Defense = NOVA.

Descriptive Note:

Research memo.,

Personal Author(s):

Cohen, S T

Holbrook, R D

Report Date:

11 Jun 1957

Media Count:

73 Page(s)

Report Number(s):

AEWES-RM-1925

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

51 - RESTRICTED DATA

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224023

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Regional Science Techniques Applicable to Regional Planning,

Report Date:

04 Jun 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133001

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIST OF UNCLASSIFIED MATHEMATICS DIVISION PUBLICATIONS, INCLUDING RELATED REPORTS
FROM OTHER DIVISIONS

Report Date:

01 Jun 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133006

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

MASSON,DAVID J

Report Date:

Jun 1957

Media Count:

1 Page(s)

Report Number(s):

S-51

Contract Number:

AF33(038)-6413

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133009

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SELECTED LIST OF ENGINEERING DIVISION PUBLICATIONS

Descriptive Note:

Research memo.

Report Date:

01 Jun 1957

Media Count:

1 Page(s)

Report Number(s):

RM-1921

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156007

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Agriculture in Communist Germany,

Report Date:

30 May 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356172

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COSTS FOR NUCLEAR POWERED SUPERSONIC STRATEGIC BOMBER WINGS

Personal Author(s):

Haven,E J

Report Date:

27 May 1957

Media Count:

35 Page(s)

Report Number(s):

RM1907

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133032

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VISUAL DETECTION OF LIGHT SOURCES ON OR NEAR THE MOON

Personal Author(s):

DOLE,S H

Report Date:

27 May 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356173

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/356173.pdf

Size: 482 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A PRELIMINARY ESTIMATE OF POSSIBLE IMPROVEMENTS IN AIRCRAFT PERFORMANCE THROUGH THE USE OF TITANIUM HONEYCOMB SANDWICH CONSTRUCTION

Personal Author(s):

Micks, W R

Kaechele, L E

Report Date:

21 May 1957

Media Count:

19 Page(s)

Report Number(s):

RM-1912

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; May 1957. Other requests shall be referred to Department of the Air Force, Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133029

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/133029.pdf

Size: 5 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRACTICAL ESTIMATED LIMITS OF BLAST RESISTANT STEEL SHELTERS

Descriptive Note:

Research memo.

Personal Author(s):

WEIDLINGER, PAUL

Report Date:

17 May 1957

Media Count:

71 Page(s)

Report Number(s):

RM-1777

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224351

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Remarks on Future Wars,

Report Date:

14 May 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123547

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ADDENDUM TO PREVIOUS USSR-US RETAIL PRICE COMPARISONS

Personal Author(s):

KAPLAN,NORMAN M

WAINSTEIN,ELEANOR S

Report Date:

13 May 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123550

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PHYSICAL ENVIRONMENT OF THE THELON RIVER AREA NORTHWEST TERRITORIES, CANADA

Report Date:

13 May 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150651

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DYNAMIC PROGRAMMING AND STOCHASTIC CONTROL PROCESSES

Personal Author(s):

BELLMAN,RICHARD

Report Date:

10 May 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123556

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE COMPUTATIONAL SOLUTION OF DYNAMIC PROGRAMMING PROCESSES. IX:A MULTISTAGE LOGISTIC-PROCUREMENT MODEL

Personal Author(s):

BELLMAN,RICHARD

DREYFUS,STUART

Report Date:

06 May 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144293

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE FORMULATION OF DYNAMIC-PROGRAMMING PROCESSES IV: ON THE ALLOCATION OF BOMBERS AND DECOYS

Personal Author(s):

BELLMAN, RICHARD

DREYFUS, STUART

Report Date:

02 May 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123539

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECTS OF DENSE RADAR DISTRIBUTIONS IN RECEIVERS

Personal Author(s):

MYERS, H A

Report Date:
01 May 1957
Media Count:
17 Page(s)
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0159709
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) INFRARED SEARCH AND A COUNTERMEASURE
Personal Author(s):
GELINAS,R W
Report Date:
May 1957
Media Count:
21 Page(s)
Report Number(s):
RM-1908
Contract Number:
AF 33(038)-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150659

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Proceedings of the Symposium on Protective Construction, May 27-29, 1957.

Report Date:

May 1957

Media Count:

1 Page(s)

Report Number(s):

S-69

Contract Number:

AF33(038)-6413

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

52 - FORMERLY RESTRICTED DATA

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224021

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Cyclic Arrangement of N-Tuples,

Report Date:

23 Apr 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244730

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Tracking and Communication for a Moon Rocket,

Personal Author(s):

GABLER,R T

O'MAARA,H R

Report Date:

22 Apr 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0145856

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

HULT,JOHN L

Report Date:

19 Apr 1957

Media Count:

7 Page(s)

Report Number(s):

RC-S-52

Contract Number:

AF 33(038)6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144277

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COMPUTATIONAL SOLUTION OF DYNAMIC-PROGRAMMING PROCESS-VIII: A BOTTLENECK
SITUATION INVOLVING INTERDEPENDENT INDUSTRIES

Personal Author(s):

BELLMAN,RICHARD

DREYFUS,STUART

Report Date:

17 Apr 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123553

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTATIONAL SOLUTIONS OF DYNAMIC-PROGRAMMING PROCESSES. VI: ON THE OPTIMAL TRAJECTORY PROBLEM

Personal Author(s):

BELLMAN,RICHARD

DREYFUS,STUART

Report Date:

16 Apr 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133026

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MOMENTS OF TWO LIMITING DISTRIBUTIONS OF KOLMOGOROV

Personal Author(s):

EDMONDSON,H P

Report Date:

15 Apr 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339288

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SURVEY AND EVALUATION OF AUXILIARY POWER SUPPLIES

Personal Author(s):

Huth,J H

Report Date:

15 Apr 1957

Media Count:

36 Page(s)

Report Number(s):

RM-1891

Report Classification:

SECRET

Distribution Limitation(s):

14 - DOD ONLY; NON-DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123543

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SOVIET UNION AND THEATOM-THE SECRET PHASE

Personal Author(s):

KRAMISH,ARNOLD

Report Date:

11 Apr 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123536

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AIR FORCE PROVISIONING POLICIES. AN ANALYSIS

Personal Author(s):

STEGER,W A

Report Date:

10 Apr 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133002

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRANSPORT COEFFICIENTS OF DISSOCIATING AND SLIGHTLY IONIZING AIR

Personal Author(s):

GREIFINGER,P S

Report Date:

09 Apr 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123537

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BRIEFING ON A METHOD OF ESTIMATING SPARE PART ESSENTIALITY

Personal Author(s):

KARR,HERBERT W

Report Date:

05 Apr 1957

Media Count:

1 Page(s)

Report Number(s):

RM-1890

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123555

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE COMPUTATIONAL SOLUTION OF DYNAMIC PROGRAMMING PROCESSES. X: THE FLYAWAY-KIT PROBLEM

Personal Author(s):

BELLMAN,RICHARD

DREYFUS,STUART

Report Date:

05 Apr 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123554

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE FORMULATION OF DYNAMIC-PROGRAMMING PROBLEMS: I

Personal Author(s):

BELLMAN,RICHARD

DREYFUS,STUART

Report Date:

04 Apr 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144289

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTATIONAL SOLUTION OF DYNAMIC-PROGRAMMING PROCESS, V: A SMOOTHING PROBLEM

Personal Author(s):

BELLMAN,RICHARD

DREYFUS,STUART

Report Date:

02 Apr 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123558

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE COMPUTATIONAL SOLUTION OF DYNAMIC-PROGRAMMING PROCESSES. IV:ON THE
OPTIMAL USE OF GUIDED MISSILES AGAINST A FIXED TARGET SYSTEM: MAXIMUM PROBABILITY OF
SUCCESS

Personal Author(s):

BELLMAN,RICHARD

DREYFUS,STUART

Report Date:
01 Apr 1957
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0339857
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) RAND Fallout Symposium
Personal Author(s):
Greenfield, S M
Rapp, R R
Report Date:
01 Apr 1957
Media Count:
160 Page(s)
Report Number(s):
S-62
AFSWP-1050
XD-DOD
Monitor Series:
DOD
Report Classification:
SECRET
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED
51 - RESTRICTED DATA
Distribution Statement:
Distribution authorized to DoD only; Administrative/Operational Use; APR 1957. Other requests shall be referred to Department of Defense, Attn: Public Affairs Office, Washington, DC 20301. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123548

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE GROWTH OF CHINA'S SCIENTIFIC AND TECHNICAL MANPOWER

Personal Author(s):

IKLE,F C

Report Date:

Apr 1957

Media Count:

1 Page(s)

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340555

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

Katz, A H

Report Date:

31 Mar 1957

Media Count:

11 Page(s)

Report Number(s):

S65

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

14 - DOD ONLY; NON-DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150656

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/150656.pdf

Size: 969 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OPTIMAL TACTICS IN DELAYED FIRING: A GAME-THEORETIC INVESTIGATION

Descriptive Note:

Working paper

Personal Author(s):

DRESHER, MELVIN

Report Date:

28 Mar 1957

Media Count:

20 Page(s)

Report Number(s):

RAND-RM-1886

XC-AFBMD

Contract Number:

AF 33(038)-6413

Monitor Series:

AFBMD

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 28 MAR 1957. Other requests shall be referred to US Air Force Deputy Chief of Staff Research Development. Attn: RAND/Anser Office, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224350

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON AN INDUSTRIAL REPLACEMENT PROCESS,

Report Date:

27 Mar 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123546

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MANPOWER PLANNING FACTORS FOR FIXED AND MOBILE AIR FORCE IRBM WEAPON SYSTEM

Personal Author(s):

HEUSTON,M C

Report Date:

26 Mar 1957
Media Count:
60 Page(s)
Report Number(s):
RM-1885
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0133011
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) MINIMUM-WEIGHT DESIGN OF SANDWICH PANELS
Personal Author(s):
KAECELE, L E
Report Date:
22 Mar 1957
Media Count:
62 Page(s)
Report Number(s):
RAND/RM-1895
XC-USAF
Monitor Series:
USAF
Report Classification:
Unclassified
Distribution Limitation(s):
05 - CONTROLLED; DOD CONTROLLED
Distribution Statement:
Distribution: Controlled: All requests to US Air Force, Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123541

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) KRUSHCHEV AND THE STALIN SUCCESSION: A STUDY OF POLITICAL COMMUNICATION IN THE U.S.S.R.

Personal Author(s):

RUSH, MYRON

Report Date:

20 Mar 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224019

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Scientific Aids to Decisionmaking-A Prespective,

Report Date:

19 Mar 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311425

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LIMITED WAR IN INDO-CHINA

Descriptive Note:

Research memo.

Personal Author(s):

Paxson, E W

Evans, J P

McKee, R G

Shaefer, R F

Strother, K C

Report Date:

18 Mar 1957

Media Count:

249 Page(s)

Report Number(s):

RAND/RM-2050

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAR 1957. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: Project Rand Office, Washington, DC 20330. Formerly Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356171

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UTILITY OF AIR-TO-SURFACE BOMBARDMENT MISSILES

Personal Author(s):

Bailey,H H

Culp,C R

Murrow,R B

Oliver,E P

Report Date:

15 Mar 1957

Media Count:

25 Page(s)

Report Number(s):

RM-1899

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123542
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) DETERRENCE
Personal Author(s):
HELMER,OLAF
Report Date:
11 Mar 1957
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0356170
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A STUDY OF A NUCLEAR PROPULSION SYSTEM WITH MANNED SUPERSONIC FLIGHT POTENTIAL
Personal Author(s):
Pinkel,Benjamin
Kirwood,T F
Report Date:
08 Mar 1957
Media Count:
35 Page(s)
Report Number(s):
RM1897
Contract Number:
AF49 638 700
Report Classification:
SECRET
Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified requesters shall obtain release approval from Director of Planning, AFRDF, USAF, Wash. 25, D. C. Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123523

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PSYCHOLOGICAL FACTOR IN SOVIET FOREIGN POLICY

Personal Author(s):

TUCKER, ROBERT C

Report Date:

07 Mar 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311328

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/311328.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROBLEMS OF NUCLEAR SHARING

Descriptive Note:

Research memo.

Personal Author(s):

Kaufmann, W W

Report Date:

04 Mar 1957

Media Count:

48 Page(s)

Report Number(s):

RAND/RM-1911

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; MAR 1957. Other requests shall be referred to Deputy Chief of Staff, Research and Technology, USAF, Directorate of Development Planning, Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123551

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A STUDY OF TURBOJET ENGINE WEIGHT

Personal Author(s):

YOUNG,G B W

Report Date:

Mar 1957

Media Count:

1 Page(s)

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224390

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A RECOVERABLE SCIENTIFIC SATELLITE,

Personal Author(s):

Gazley,Carl ,Jr

Masson,David J

Report Date:

27 Feb 1957

Media Count:

22 Page(s)

Report Number(s):

P-958

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0150660

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/150660.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OPTIMAL EMPLOYMENT OF TACTICAL AIR FORCES IN THEATER AIR TASKS: A GAME-THEORETIC ANALYSIS

Descriptive Note:

Research Memorandum

Personal Author(s):

Berkovitz, Leonard D

Dresher, Melvin

Report Date:

21 Feb 1957

Media Count:

26 Page(s)

Report Number(s):

RAND-RM-1877

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 21 FEB 1957. Other requests shall be referred to US Air Force Research and Development, Attn: Rand Project Office, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133036

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SECOND TOOLING-UP EXERCISE OF LOGISTICS SYSTEMS LABORATORY. PROLOG II, 14 JAN - 20 FEB 57

Report Date:

20 Feb 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0244719

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Accuracy Requirements for Trajectories in the Earth-Moon System.

Personal Author(s):

LIESKE,H A

Report Date:

19 Feb 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0221678

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DECELERATION AND HEATING OF A BODY ENTERING A PLANETARY ATMOSPHERE FROM SPACE

Personal Author(s):

GAZLEY,CARL JR

Report Date:

18 Feb 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123538

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FIBERED MATERIALS FOR FLIGHT STRUCTURES

Personal Author(s):

HOFFMAN,GEORGE A

Report Date:

18 Feb 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123559

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GERMAN REARMAMENT AND ATOMIC WAR

Personal Author(s):

SPEIR, HANS

Report Date:

15 Feb 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123552

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ODESSA, 1941-1944: A CASE STUDY OF SOVIET TERRITORY UNDER FOREIGN RULE

Personal Author(s):

DALLIN, ALEXANDER

Report Date:

14 Feb 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123521

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE POLITICS OF SOVIET DE-STALINIZATION

Personal Author(s):

TUCKER,ROBERT C

Report Date:

14 Feb 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133014

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MATERIALS-INPUT INDEX OF SOVIET CONSTRUCTION 1927/28 TO 1955. PART I,

Personal Author(s):
Powell,Raymond P
Report Date:
14 Feb 1957
Media Count:
1 Page(s)
Report Number(s):
RM-1872
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0133015
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A MATERIALS-INPUT INDEX OF SOVIET CONSTRUCTION 1927/28 TO 1955. PART II. APPENDICES,
Personal Author(s):
Powell,Raymond P
Report Date:
14 Feb 1957
Media Count:
1 Page(s)
Report Number(s):
RM-1873
Contract Number:
AF 33(038)6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123519

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DESIGN CHANGE IMPACTS ON AIRFRAME PARTS INVENTORIES

Personal Author(s):

PETERSEN,JAMES W

STEGER,WILBUR A

Report Date:

07 Feb 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123529

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STRATEGIC AIR POWER IN WORLD WAR II

Personal Author(s):

BRODIE,BERNARD

Report Date:

04 Feb 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123532

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PROPULSIVE WING - A MEANS OF REDUCING AIRPLANE DRAG

Personal Author(s):

CARTAINO,T F

JOHNSON,R P

Report Date:

Feb 1957

Media Count:

1 Page(s)

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123513

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON B. KLEIN'S DIRECT USE OF EXTREMAL PRINCIPLES IN SOLVING CERTAIN PROBLEMS INVOLVING INEQUALITIES

Personal Author(s):
DANTZIG,GEORGE B
Report Date:
29 Jan 1957
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0144285
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) HYPERSONIC AERODYNAMICS
Personal Author(s):
WILLIAMS,E P
Report Date:
29 Jan 1957
Media Count:
28 Page(s)
Report Number(s):
S-47
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123526

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF THE ROTATIONAL MOTION OF AN ICBM DURING RE-ENTRY

Personal Author(s):

GARBER,T B

Report Date:

28 Jan 1957

Media Count:

59 Page(s)

Report Number(s):

RM-1863

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123515

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN INDUSTRIAL-LOCATION PLANNING PROBLEM

Personal Author(s):

GROSS,O

JOHNSON,S M

Report Date:

28 Jan 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123533

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON LINEAR PROGRAMMING, PART 39, SLIGHTLY INTERTWINED LINEAR PROGRAMMING
MATRICES

Personal Author(s):

BELLMAN,RICHARD

Report Date:

23 Jan 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224384

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NATIONALIZATION OF RESEARCH AND DEVELOPMENT IN THE U. S. A COMMENTARY ON THE
DEMAND AND SUPPLY OF SCIENTISTS AND ENGINEERS,

Personal Author(s):

DeHaven,James C

Report Date:

21 Jan 1957

Media Count:

20 Page(s)

Report Number(s):

P-879-RC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123527

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME CONSIDERATIONS OF THE ROLE OF THE U.S. AIR FORCE IN LIMITED WAR

Personal Author(s):

ANSOFF,H I

Report Date:

16 Jan 1957

Media Count:

38 Page(s)

Report Number(s):

RM-1856

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338588

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FALLOUT COMPUTATIONS AND CASTLE-BRAVO - A CASE STUDY

Personal Author(s):

Greenfield,S M

Rapp,AND R R

Report Date:

16 Jan 1957

Media Count:

72 Page(s)

Report Number(s):

RM1855

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112417

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CARGO DENSITY AND AIRLIFT

Personal Author(s):

BICKNER,ROBERT E

Report Date:

14 Jan 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123535

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE COMPUTATIONAL SOLUTION OF DYNAMIC PROGRAMMING PROCESSES III.ON THE OPTIMAL
USE OF GUIDED MISSILES AGAINST A FIXED TARGET SYSTEM. MAXIMUM EXPECTED DAMAGE

Personal Author(s):

BELLMAN,RICHARD

DREYFUS,STUART

Report Date:

11 Jan 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0221075

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DIRECT CONVERSION OF FISSION TO ELECTRIC ENERGY IN LOW TEMPERATURE REACTORS

Personal Author(s):

SAFANOV,GEORGE

Report Date:

08 Jan 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0249504

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPLICATION OF SUPERCONDUCTIVITY TO INERTIAL NAVIGATION

Personal Author(s):

CULVER,W H

DAVIS,M H

Report Date:

07 Jan 1957

Media Count:

12 Page(s)

Report Number(s):

R-363

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356168

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN EVALUATION OF REDWING RADIOLOGICAL EXPERIMENTS

Personal Author(s):

Tucker, B L

Report Date:

03 Jan 1957

Media Count:

8 Page(s)

Report Number(s):

RM1848

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

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Notice: Release only to U. S. Government Agencies is authorized. Other certified requesters shall obtain release approval from Director of Planning, AFRDF, USAF, Wash. 25, D. C. Release or announcement to foreign governments or their nationals is not authorized. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123511

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THOMAS-FERMI EQUATION OF STATE FOR DILUTE GASES

Personal Author(s):

LATTER,RICHARD

Report Date:

03 Jan 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123540

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

FORD,L R JR

FULKERSON,D R

Report Date:

Jan 1957

Media Count:

1 Page(s)

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133038

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A DISCUSSION OF THE RAND SPACE FLIGHT PROGRAM PRESENTED BY THE RAND CORPORATION TO THE AIR FORCE SCIENTIFIC ADVISORY BOARD ON ADVANCED WEAPONS TECHNOLOGY AND ENVIRONMENT, JULY 29, 1957

Report Date:

Jan 1957

Media Count:

58 Page(s)

Report Number(s):

S-59

Contract Number:

AF

33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123525

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COMMENTS ON REQUIREMENTS FOR CERTAIN CHAFF APPLICATIONS

Personal Author(s):

HULT, JOHN L

Report Date:

Jan 1957

Media Count:

17 Page(s)

Report Number(s):

RC-S-48

Contract Number:

AF 33(038)6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123524

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A DISCUSSION OF THE PERFORMANCE OF SURVEILLANCE AND ACQUISITION RADARS IN THE
PRESENCE OF CHAFF

Personal Author(s):

MALLETT, JOHN

Report Date:

Jan 1957

Media Count:

23 Page(s)

Report Number(s):

RC-S-46

Contract Number:

AF 33(038)6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123520

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BASE-DEPOT MODEL STUDIES

Personal Author(s):

KARR,HERBERT W

Report Date:

01 Jan 1957

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123544

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GENERALIZED RADAR CONCEPTS WITH THE USE OF ARRAY ANTENNA

Personal Author(s):

HUGGINS,W H

Report Date:

30 Dec 1956

Media Count:

71 Page(s)

Report Number(s):

RM-1854

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112420

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CHARACTERISTIC ENERGY LOSS OF ELECTRONS PASSING THROUGH METAL FOILS: II. DISPERSION
RELATION AND SHORT WAVE LENGTH CUTOFF FOR PLASMA OSC

Report Date:

28 Dec 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112406

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A RECOVERABLE SCIENTIFIC SATELLITE

Personal Author(s):

GAZLEY,CARL JR

MASSON,DAVID J

Report Date:

21 Dec 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338507

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) STAFF REPORT.

Report Date:

20 Dec 1956

Media Count:

32 Page(s)

Report Number(s):

R 301

Contract Number:

AF18 600 1600

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123522

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LEADERS OF COMMUNIST CHINA

Personal Author(s):

HINTON,HAROLD C

Report Date:

20 Dec 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112401

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IMPLICATIONS OF NUCLEAR WEAPONS IN TOTAL WAR

Personal Author(s):

BRODIE,BERNARD

Report Date:

17 Dec 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356164

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PROPOSED METHOD FOR ARMED RECONNAISSANCE

Personal Author(s):

Sharkey,E H

Report Date:

15 Dec 1956

Media Count:

41 Page(s)

Report Number(s):

RM1771

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339964

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) (No title).

Descriptive Note:

Staff rept.

Report Date:

15 Dec 1956

Media Count:

36 Page(s)

Report Number(s):

R299

Contract Number:

AF18 600 1600

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133004

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VTOL-STOL ENGINE THRUST REQUIREMENTS AS AFFECTED BY TEMPERATURE AND ELEVATION IN SOUTHERN ASIA

Personal Author(s):

WILSON,J A

Report Date:

12 Dec 1956

Media Count:

36 Page(s)

Report Number(s):

RM-1840

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112409

Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) RAND RESEARCH - AN ORIENTATION
Personal Author(s):
HOAG, MALCOLM W
Report Date:
10 Dec 1956
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0112399
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOVIET ATOMIC BLACKMAIL AND THE NORTH ATLANTIC ALLIANCE
Personal Author(s):
SPEIER,HANS
Report Date:
10 Dec 1956
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB263808

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A Discussion of an Optimum USAF Reconnaissance Posture

Descriptive Note:

Research memo.,

Personal Author(s):

Macdonald, Duncan E

Report Date:

08 Dec 1956

Media Count:

46 Page(s)

Report Number(s):

RAND/RM-1826

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311327

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/311327.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ECONOMIC COMPARISONS OF MILITARY AIR TRANSPORT FLEETS, DETAILS OF THE METHOD USED IN R-294

Descriptive Note:

Research memo.

Personal Author(s):

McGuire, C B

Report Date:

07 Dec 1956

Media Count:

92 Page(s)

Report Number(s):

RAND/RM-1836

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; DEC 1956. Other requests shall be referred to Deputy Chief of Staff, Research and Technology, USAF, Directorate of Development Planning, Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112411

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DISCRETE-VARIABLE EXTREMUM PROBLEMS

Personal Author(s):

DANTZIG,G B

Report Date:

06 Dec 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224391

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SPECIFIC HEAT OF A DEGENERATE ELECTRON GAS AT HIGH DENSITY,

Personal Author(s):

Gell-Mann,Murray

Report Date:

05 Dec 1956

Media Count:

11 Page(s)

Report Number(s):

P-988-AEC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339831

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) REMARKS ON THE SUN LAMP PROPOSAL

Descriptive Note:

Research memorandum

Personal Author(s):

Latter, Albert

Latter, Richard

Report Date:

05 Dec 1956

Media Count:

12 Page(s)

Report Number(s):

RM-1831

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; 05 DEC 1956. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Washington, DC 20330.

Restricted Data. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133005

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

MACDONALD,DUNCAN E

Report Date:

Dec 1956

Media Count:

38 Page(s)

Report Number(s):

RM-1826

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133022

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DETAILED SURVEY OF TEMPERATURE, TOPOGRAPHY, AND PRECIPITATION IN SOUTHWEST AND SOUTHEAST ASIA. A STUDY OF SOME FACTORS AFFECTING ENGINE THRUST CHARACTERISTICS AND REQUIREMENTS

Personal Author(s):

WILSON,J A

Report Date:

Dec 1956

Media Count:

114 Page(s)

Report Number(s):

RM-1841

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112391

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SPECIFIC HEAT OF A DEGENERATE ELECTRON GAS AT HIGH DENSITY

Personal Author(s):

GELLMANN,MURRAY

Report Date:

30 Nov 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112416

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE APPLICATION OF A NON-LINEAR TERMINAL GUIDANCE SYSTEM TO THE BMD PROBLEM

Personal Author(s):

SMITH,F T

ROWELL,L N

Report Date:

24 Nov 1956

Media Count:

107 Page(s)

Report Number(s):

RM-1822

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133025

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/133025.pdf

Size: 839 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LINEARIZED SOLUTION FOR HEAT ADDITION AT THE SURFACE OF A SUPERSONIC AIRFOIL

Descriptive Note:

Research memo.

Personal Author(s):

GAZLEY, CARL, Jr

Report Date:

21 Nov 1956

Media Count:

31 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operationa use; 21 Nov 1956. Other requests shall be referred to Department of the Air Force, Washington DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112395

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUILIBRIUM POINTS IN GAMES WITH VECTOR PAYOFFS

Personal Author(s):

SNAPLEY,L S

Report Date:

15 Nov 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123516

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNICATIONS NETWORKS. II. INTEROFFICE TRUNKING PROBLEMS

Personal Author(s):

KALABA,R E

JUNCOSA,M L

Report Date:

15 Nov 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356926

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETERMINATION OF THERMAL RADII FOR AIRCRAFT

Personal Author(s):

Elswick, W R

Report Date:

09 Nov 1956

Media Count:

29 Page(s)

Report Number(s):

RM1816

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112404

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE COMPUTATIONAL SOLUTION OF DYNAMIC-PROGRAMMING PROCESSES. II. ON A CARGO-LOADING PROBLEM

Personal Author(s):

BELLMAN,R E

DREYFUS,S E

Report Date:

05 Nov 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112414

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AIR FORCE LOGISTICS, SOME RECENT DEVELOPMENTS

Personal Author(s):

FERGUSON,ALLEN R

Report Date:

05 Nov 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356167

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/356167.pdf

Size: 665 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SNARK IN A BOMBARDMENT ROLE

Descriptive Note:

Research memo.

Personal Author(s):

Wakeley, Jay T

Report Date:

31 Oct 1956

Media Count:

25 Page(s)

Report Number(s):

RM-1815

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; Oct 1956. Other requests shall be referred to Hq. USAF, Deputy Chief of Staff, Research and Development, Directorate of Development Planning, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112377

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON NEUTRON FLUX-CURRENT BOUNDARY CONDITIONS AT GAPS IN ONE DIMENSIONAL SYSTEMS

Personal Author(s):

SAFONOV,GEORGE

Report Date:

25 Oct 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356166

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PERFORMANCE CONSIDERATIONS OF MANNED BOMBING AIRCRAFT WITH NUCLEAR POWERPLANTS UNDER CURRENT DEVELOPMENT

Personal Author(s):

Schamberg,R

Kirkwood,T F

Report Date:

23 Oct 1956

Media Count:

28 Page(s)

Report Number(s):

RM1812

Contract Number:

AF49 638 700

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311332

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CHINA-4: THE PUKIEN MOUSETRAP,

Personal Author(s):

Dudley, V S

Report Date:

19 Oct 1956

Media Count:

1 Page(s)

Report Number(s):

RM-2051

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: U. S. Government agencies may obtain copies of this report directly from DDC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311427

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIMITED WAR IN FORMOSA: FORMOSA-4,

Personal Author(s):

Paxson,E W

Brom,J R

Dudley,V S

Lockhart,R G

Shaefer,R F

Report Date:

18 Oct 1956

Media Count:

59 Page(s)

Report Number(s):

RM2049

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Notice: Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0222609

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ATMOSPHERE OF VENUS

Personal Author(s):

DOLE,S H

Report Date:

12 Oct 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123549

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VULNERABILITY AND RECUPERATION OF A REGIONAL ECONOMY. A STUDY OF THE IMPACT OF
HYPOTHETICAL ATOMIC ATTACK ON NEW ENGLAND

Personal Author(s):

CLARK,PAUL G

Report Date:

12 Oct 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112378

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A METHOD FOR ESTIMATING ENGINE FAILURE RATES

Personal Author(s):

HARRIS,T E

Report Date:

09 Oct 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112419

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Airborne Radar Requirements for High-Speed Combat.

Descriptive Note:

Research memo.,

Personal Author(s):

JOHNSON,R H

EMERSON,D E

Report Date:

09 Oct 1956

Media Count:

167 Page(s)

Report Number(s):

RM-1808

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112379

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DYNAMIC STRENGTH OF RIGID-PLASTIC BEAMS UNDER BLAST LOADS

Personal Author(s):

SALVADORI,MARIO G

WEIDLINGER,PAUL

Report Date:

08 Oct 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0100024

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF SOVIET AND AMERICAN RETAIL PRICES IN 1950

Personal Author(s):

KAPLAN,NORMAN M

WAINSTEIN,ELEANOR S

Report Date:

03 Oct 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112396

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IS THERE A DEFENSE

Personal Author(s):

BRODIE, BERNARD

Report Date:

03 Oct 1956

Media Count:

65 Page(s)

Report Number(s):

RM-1781

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112390

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) SOVIET COLLECTIVE LEADERSHIP
Personal Author(s):
BERNAUT,ELSA
RUGGLES,MELVILLE J
Report Date:
01 Oct 1956
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0116029
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A LINEAR PROGRAMMING MODEL OF THE GASEOUS DIFFUSION ISOTOPE-SEPARATION PROCESS
Personal Author(s):
FORT,D M
Report Date:
01 Oct 1956
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123560

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) VULNERABILITY OF LANDLINE COMMUNICATIONS FOR SAC AND ADC

Personal Author(s):

ELDRIDGE, F R

CARNE, J B

Report Date:

Oct 1956

Media Count:

81 Page(s)

Report Number(s):

RC-RM-1774

XC-USAF

Contract Number:

AF 33(038)-6412

Monitor Series:

USAF

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112415

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE GOODNESS-OF-FIT STATISTICS OF KOLMOGOROV AND SMIRNOV

Personal Author(s):

EDMUNDSON,H P

Report Date:

30 Sep 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112381

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CONCERNING THE ALLOCATION OF DECOYS TO MINIMIZE BOMBER LOSSES

Personal Author(s):

BALLANTYNE, F P

EVERETT, J L

Report Date:

26 Sep 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112392

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) CONCERNING MULTICOMMODITY NETWORKS
Personal Author(s):
ROBACKER,J T
Report Date:
26 Sep 1956
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0356175
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) MINIMUM USEFUL ACTIVATION LEVELS OF CERTAIN RADIOLOGICAL WEAPONS
Personal Author(s):
Tucker,B L
Report Date:
25 Sep 1956
Media Count:
10 Page(s)
Report Number(s):
RM1810
Report Classification:
SECRET
Distribution Limitation(s):
03 - U.S. GOVT. ONLY; DOD CONTROLLED
51 - RESTRICTED DATA
Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified request-ers shall obtain release approval from Director of Planning, AFRDF, USAF, Wash. 25, D. C. Re-lease or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112372

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PRIMAL DUAL ALGORITHM FOR THE CAPACITATED HITCHCOCK PROBLEM

Personal Author(s):

FORD, L R JR

FULKERSON, D R

Report Date:

25 Sep 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0117481

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE OPTIMIZATION OF TWO STAGE ROCKETS

Personal Author(s):

GOLDSMITH, M

Report Date:

21 Sep 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338508

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

Wakeley, Jay T

Report Date:

21 Sep 1956

Media Count:

43 Page(s)

Report Number(s):

RM

1795

Report Classification:

SECRET

Distribution Limitation(s):

14 - DOD ONLY; NON-DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311465

Corporate Author:

RAND CORP SANTA MONICA CA

Descriptive Note:

Research memo.

Personal Author(s):

Paxson, E W

Evans, J P

Report Date:

18 Sep 1956

Media Count:

99 Page(s)

Report Number(s):

RAND/RM-2035

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; SEP 1956. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Project Rand Office, Washington, DC 20330. Document partially illegible. Formerly Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311424

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CHINA EXERCISES, PROJECT SIERRA

Personal Author(s):

Paxson, E W

Brom, J R

Dudley, V S

Quade, E S

Shaefer, R F

Report Date:

18 Sep 1956

Media Count:

72 Page(s)

Report Number(s):

RAND/RM-2048

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; SEP 1956. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: Project Rand Office, Washington, DC 20330. Document partially illegible. Formerly Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133230

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC ASPECTS OF MILITARY PLANNING

Personal Author(s):

HITCH,C J

Report Date:

12 Sep 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0454617

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FACTORS AFFECTING MALFUNCTION RATES OF F-86F AND F-86D AIRCRAFT,

Personal Author(s):

LAVallee,R S

Stoller,D S

Report Date:

12 Sep 1956

Media Count:

36 Page(s)

Report Number(s):

RM1790

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112515

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPRECIATION FOR THE TRUE GROSS WEIGHT PENALTY TO BE PAID FOR A VERTICAL TAKE-OFF
CAPABILITY IN A FIGHTER TYPE AIRCRAFT

Descriptive Note:

Research memo.,

Personal Author(s):

STURDEVANT,C V

Report Date:

10 Sep 1956

Media Count:

10 Page(s)

Report Number(s):

RM-1791

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112387

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CORRELATION OF WING BODY LIFT-CURVE SLOPES AT SUPERSONIC SPEEDS FOR USE IN AIRPLANE
DESIGN STUDIES

Personal Author(s):

BLAKESLEE,D J

Report Date:

Sep 1956

Media Count:

1 Page(s)

Report Number(s):

RM-1797

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112413

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELATIONSHIPS BETWEEN WEAPONS AND LOGISTICS EXPENDITURES

Personal Author(s):

GEISLER,MURRAY A

Report Date:

28 Aug 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0110885

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THERMODYNAMIC PROPERTIES OF MIXTURES ON THE STATISTICAL MODEL

Personal Author(s):

GILVARRY,J J

MCMILLAN,W G

Report Date:

28 Aug 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0109940

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COSTS AND BENEFITS IN MATHEMATICAL PROGRAMMING

Personal Author(s):

MANNE,A S

Report Date:

27 Aug 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112514

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RANGE CHARACTERISTICS OF A FAMILY OF VERTICAL TAKE-OFF AND LANDING FIGHTER BOMBER AIRCRAFT.

Descriptive Note:

Research memo.,

Personal Author(s):

SMITH,G K

Report Date:

23 Aug 1956

Media Count:

25 Page(s)

Report Number(s):

RM-1783

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311463

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LIMITED WAR IN THAILAND: THAI-2, SUMMARY

Descriptive Note:

Research memo.

Personal Author(s):

Paxson, E W

Reinhardt, G C

Report Date:

20 Aug 1956

Media Count:

28 Page(s)

Report Number(s):

RAND/RM-2028

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff Research and Development (Air Force), Project Rand Office, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311388

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LIMITED WAR IN FORMOSA: FORMOSA-3

Descriptive Note:

Research memo.

Personal Author(s):

Paxson, E W

Evans, J P

Hastings, W H

McKee, R G

Strother, K C

Report Date:

13 Aug 1956

Media Count:

60 Page(s)

Report Number(s):

RAND/RM-2047

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111506

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HYPERSONIC, NON-VISCOUS FLOW AROUND A SPHERE

Personal Author(s):

SERBIN,H

Report Date:

13 Aug 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311386

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIMITED WAR IN BURMA: BURMA-1, LOGISTICS,

Personal Author(s):

Paxson ,E W

Bickner ,R E

Hastings,W H

Report Date:

13 Aug 1956

Media Count:

1 Page(s)

Report Number(s):

RM-2040

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311387

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LIMITED WAR IN FORMOSA-KOREA: FORMOSA-KOREA-2

Personal Author(s):

Paxson, E W

Lockhart, R G

McKee, R G

Report Date:

13 Aug 1956

Media Count:

30 Page(s)

Report Number(s):

RAND/RM-2046

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311385

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/311385.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LIMITED WAR IN BURMA: BURMA-1, NAVAL OPERATIONS

Descriptive Note:

Research memo.

Personal Author(s):

Paxson, E W

Cone, W

Rood, G A

Report Date:

13 Aug 1956

Media Count:

61 Page(s)

Report Number(s):

RM-2039

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 13 AUG 1956. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: RAND Project Office, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311384

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/311384.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LIMITED WAR IN BURMA: BURMA-1, AIR OPERATIONS

Descriptive Note:

Research memo.

Personal Author(s):

Paxson, E W

Brom, J R

de LaVigne, F A

Dudley, V S

Edmundson, H P

Report Date:

13 Aug 1956

Media Count:

89 Page(s)

Report Number(s):

RAND/RM-2037

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; AUG 1956. Other requests shall be referred to Deputy Chief of Staff, Research and Technology, USAF, Directorate of Development Planning, Project Rand Office, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123518

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RANGE COMPARISON OF BOMBERS WITH AFTERBURNING AND NON-AFTERBURNING TURBOJET ENGINES

Personal Author(s):

CARTAINO,T F

Report Date:

08 Aug 1956

Media Count:

32 Page(s)

Report Number(s):

RM-1787

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356169

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THERMAL RADIATION FROM ATOMIC DETONATIONS AT TIMES NEAR BREAKAWAY

Personal Author(s):

Brode,H L

Meyerott,R E

Report Date:

07 Aug 1956

Media Count:

38 Page(s)

Report Number(s):

RM1851

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112385

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE DETECTION OF STOCHASTIC SIGNALS IN ADDITIVE NORMAL NOISE. PART I

Personal Author(s):

MIDDLETON,DAVID

Report Date:

06 Aug 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112374

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECTS OF AERODYNAMIC FORCES UPON THE ICBM RE-ENTRY TRAJECTORY

Personal Author(s):

GARBER,T B

Report Date:

Aug 1956

Media Count:

29 Page(s)

Report Number(s):

RM-1782

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133007

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OBSERVATIONS OF THE MOON FROM THE MOON'S SURFACE

Personal Author(s):

KELLOGG,W W

Report Date:

27 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356163

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EVALUATION OF PEACETIME MOBILITY FOR THE PROTECTION OF EUROPEAN THEATER AIR FORCES IN A LIMITED NUCLEAR-WAR ENVIRONMENT

Personal Author(s):

Sturdevant,C V

Report Date:

25 Jul 1956

Media Count:

29 Page(s)

Report Number(s):

RM1767

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0125335

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SELECTED LIST OF UNCLASSIFIED RESEARCH MEMORANDA OF THE ECONOMICS DIVISION OF THE
RAND CORPORATION

Report Date:

24 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0110881

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESTIMATING GROUND MOTIONS RESULTING FROM AIR-INDUCED GROUND SHOCKS

Personal Author(s):

HUTH,J H

Report Date:

23 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224388

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EVOLUTION OF LINEAR PROGRAMMING COMPUTING TECHNIQUES,

Personal Author(s):

Orchard-Hays,WM

Report Date:

18 Jul 1956

Media Count:

17 Page(s)

Report Number(s):

P-900

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0108749

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A LINEAR PROGRAMMING MODEL OF THE U.S. PETROLEUM REFINING INDUSTRY

Personal Author(s):

MANNE,ALAN S

Report Date:

17 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0490028

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/490028.pdf

Size: 588 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A TANK DUEL WITH GAME-THEORETIC IMPLICATIONS

Personal Author(s):

Zachrisson, L E

Robbins, James J

Report Date:

17 Jul 1956

Media Count:

18 Page(s)

Report Number(s):

RAND-T-65

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Foreign Government Information;
17 JUL 1956. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office,
Washington DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224387

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLVING THE TRANSPORTATION PROBLEM,

Personal Author(s):

Ford Jr,L R

Fulkerson,D R

Report Date:

17 Jul 1956

Media Count:

15 Page(s)

Report Number(s):

P-895

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224562

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

13 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: DDC users only. Availability: Microfilm only after original copies are exhausted.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0108746

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A REVISED DATA PROCESSING SYSTEM FOR MANAGING WAR RESERVE STOCKS OF AIRCRAFT SPARE PARTS

Personal Author(s):

NELSON,H W

TUPAC,J D

Report Date:

13 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224375

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

12 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0508985

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Limited War in Thailand: Thai-2, Logistics.

Descriptive Note:

Research memo.,

Personal Author(s):

Paxson,E W

Hastings,W H

Report Date:

11 Jul 1956

Media Count:

53 Page(s)

Report Number(s):

RM-2033

Contract Number:

AF 49(638)-700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Microfiche copies only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311423

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LIMITED WAR IN THAILAND: THAI-2, GROUND COMBAT

Descriptive Note:

Research memo.

Personal Author(s):

Paxson, E W

Evans, J P

Reinhardt, G C

Strother, K C

Report Date:

11 Jul 1956

Media Count:

148 Page(s)

Report Number(s):

RAND/RM-2030

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUL 1956. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: Project Rand Office, Washington, DC 20330. Document partially illegible. Formerly Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311464

Corporate Author:

RAND CORP SANTA MONICA CA

Descriptive Note:

Research memo.

Personal Author(s):

Paxson, E W

Brom, J R

Reinhardt, G C

Edmundson, H P

Report Date:

11 Jul 1956

Media Count:

74 Page(s)

Report Number(s):

RAND/RM-2034

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUL 1956. Other requests shall be referred to Controlling DoD Organization: Deputy Chief of Staff Research and Development (Air Force), Project Rand Office, Washington, DC 20330. Formerly Restricted Data. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311383

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LIMITED WAR IN THAILAND: THAI-2 NAVAL OPERATIONS

Descriptive Note:

Research memo.

Personal Author(s):

Paxson, E W

Rood, G A

Report Date:

11 Jul 1956

Media Count:

123 Page(s)

Report Number(s):

RAND/RM-2031

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUL 1956. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: Project Rand Office, Washington, DC 20330. Formerly Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0422839

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WEAPON SYSTEM COST ANALYSIS,

Personal Author(s):

Fisher,G H

Report Date:

10 Jul 1956

Media Count:

20 Page(s)

Report Number(s):

P823

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: NO FORN, Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311426

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIMITED WAR IN THAILAND: THAI-2 LAND-BASED AIR OPERATIONS,

Personal Author(s):

Paxson ,E W
Brom ,J R
Dudley ,V S
de LaVigne ,F A
Garland,W H

Report Date:

10 Jul 1956

Media Count:

88 Page(s)

Report Number(s):

RM2029

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Notice: Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123528

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE COMPUTATIONAL SOLUTION OF DYNAMIC-PROGRAMMING PROCESSES--I. ON A TACTICAL
AIR-WARFARE MODEL OF MENGEL

Personal Author(s):

BELLMAN,RICHARD

DREYFUS,STUART

Report Date:

05 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0222883

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) FALLOUT COMPUTATIONS FOR OPERATIONAL STUDIES (U)

Personal Author(s):

RAPP, R R

Report Date:

05 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: No Forn, Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112373

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DISTRIBUTION OF RADIAL ERROR AND ITS STATISTICAL APPLICATION IN WAR GAMING

Personal Author(s):

EDMUNDSON,H P

Report Date:

05 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0104678

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RECENT TRENDS IN SOVIET LABOR POLICY

Personal Author(s):

GLIKSMAN,J

Report Date:

02 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144291

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE OPTIMAL USE OF GUIDED MISSILES - I: ALLOCATION OF MISSILES

Personal Author(s):

BELLMAN, RICHARD

Report Date:

02 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0105409

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/105409.pdf

Size: 806 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A TABLE OF THE PLANCK RADIATION FUNCTION AND ITS INTEGRAL

Descriptive Note:

Research memo.

Personal Author(s):

GILMORE, F R

Report Date:

02 Jul 1956

Media Count:

25 Page(s)

Report Number(s):

RM-1743

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Jul 1956. Other requests shall be referred to Headquarters, Department of the Air Force, Attn: Rand Project Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144292

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE OPTIMAL USE OF GUIDED MISSILES-II: DUMMY MISSILES

Personal Author(s):

BELLMAN, RICHARD

Report Date:

02 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0107426

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/107426.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Characteristics of Demand for Aircraft Spare Parts

Personal Author(s):

Brown, Bernice B

Report Date:

Jul 1956

Media Count:

45 Page(s)

Report Number(s):

RAND-R-292

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Specific Authority; 24 Nov 99.

Other requests shall be referred to DTIC-BRR, 8725 John J. Kingman Rd. Ste 0944, Ft. Belvoir, VA 22060-6218

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0105540

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COST-QUANTITY RELATIONSHIPS IN THE AIR-FRAME INDUSTRY

Personal Author(s):

ASHER, HAROLD

Report Date:

01 Jul 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Distribution Statement:

Availability: Reference only, can be reviewed at DTIC only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112516

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PREDICTIONS AND MEASUREMENTS OF RADAR SIGNAL DENSITIES

Personal Author(s):

MYERS,H A

VAN EVERY,A

Report Date:

Jul 1956

Media Count:

67 Page(s)

Report Number(s):

RM-1700

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356220

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROTECTING U.S. STRATEGIC RETALIATORY POWER-ASSUMED PLANS FOR U.S. AIR DEFENSE

Personal Author(s):

Stillman,W P

Wilson,J A

Report Date:

26 Jun 1956

Media Count:

23 Page(s)

Report Number(s):

TM1738

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified requesters shall obtain release approval from Director of Planning, U. S. Air Force, Wash. 25, D. C. Attn:AFRDP.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112371

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A THEOREM ON FLOWS IN NETWORKS

Personal Author(s):

GALE,DAVID

Report Date:

22 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0490025

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/490025.pdf

Size: 456 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RESULTS OF EXPERIMENTS IN ORGANIZING THE STEPWISE SCHEDULED ROUTES ON THE RR LINE
KOROSTETEN - ODESSA

Personal Author(s):

Dulnyev,

Furman,

Baranov,

Sinyov,

Jittlov, Vadim S

Report Date:

21 Jun 1956

Media Count:

12 Page(s)

Report Number(s):

RAND-T62

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Foreign Government Information;
21 JUN 1956. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office,
Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0108750

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A CASEBOOK ON SOVIET ASTRONAUTICS,

Personal Author(s):

KRIEGER, F J

Report Date:

21 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0490027

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/490027.pdf

Size: 793 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SCATTERING OF LIGHT IN PLANETARY ATMOSPHERES

Personal Author(s):

Ambartsumian, V A

Kalaba, R E

Report Date:

21 Jun 1956

Media Count:

30 Page(s)

Report Number(s):

RAND-T-63

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 21 JUN 1956. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111816

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLVING THE TRANSPORTATION PROBLEM

Personal Author(s):

FORD,L R JR

FULKERSON,D R

Report Date:

20 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0490026

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/490026.pdf

Size: 290 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON AMPLITUDE AND PHASE PULSATIONS OF A WAVE PROPAGATING IN A SLIGHTLY
INHOMOGENEOUS ATMOSPHERE

Personal Author(s):

Tatarskii, V I

Kalaba, R E

Report Date:

19 Jun 1956

Media Count:

13 Page(s)

Report Number(s):

RAND-T-64

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUN 1956. Other requests shall be referred to Department of the Air Force, Attn: Rand Project Officer, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224386

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON WARFARE IN THE NEXT TEN TO TWENTY YEARS,

Personal Author(s):

Peterson,N C

Report Date:

19 Jun 1956

Media Count:

14 Page(s)

Report Number(s):

P-889

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224240

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On the Accuracy of the Long Range Ballistic Rocket,

Personal Author(s):

Frye, W E

Report Date:

14 Jun 1956

Media Count:

15 Page(s)

Report Number(s):

P135

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133021

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ARTIFICIAL SATELLITES OF THE MOON

Personal Author(s):

BUCHHEIM, ROBERT W

Report Date:

14 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0096903

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RESEARCH AND DEVELOPMENT OF A NEW DATA-PROCESSING SYSTEM FOR AIR FORCE LOGISTICS

Personal Author(s):

GEISLER,M A

POSTLEY,J A

Report Date:

13 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0888521

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Some Tactical Considerations in Regard to the Z(126-A)ZWeapon System,

Personal Author(s):

Jenkins,J L

Report Date:

13 Jun 1956

Media Count:

35 Page(s)

Report Number(s):

S-63

Contract Number:

AF 49(638)-700

Report Classification:

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03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution limited to U.S. Gov't. agencies only; Test and Evaluation; 22 Oct 71. Other requests for this document must be referred to Headquarters, Department of the Air Force, Attn: AFRDQLR. Washington, D. C. 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111505

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COLLECTIVE FARM INVESTMENT IN THE USSR

Personal Author(s):

KAPLAN,NORMAN M

Report Date:

12 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112135

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NEW APPROACH TO THE MILITARY BUDGET

Personal Author(s):

NOVICK,DAVID

Report Date:

12 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356159

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COST ESTIMATES FOR 16 ICBM SYSTEMS

Personal Author(s):

Heuston,M C

Margolis,M A

O'Sullivan,J J

Report Date:

12 Jun 1956

Media Count:

31 Page(s)

Report Number(s):

RM1661

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0105164

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BALLISTIC MISSILE ACCURACY AT REDUCED RANGE

Descriptive Note:

Research memo.,

Personal Author(s):

FRICK,RICHARD H

Report Date:

08 Jun 1956

Media Count:

23 Page(s)

Report Number(s):

RM-1712

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123530

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLUTION OF RANKING PROBLEM FROM BINARY COMPARISONS

Personal Author(s):

FORD,L R

Report Date:

07 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112403

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LUNAR INSTRUMENT CARRIER. LANDING FACTORS

Personal Author(s):

LANG,H A

Report Date:

04 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112402

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LUNAR INSTRUMENT CARRIER. ATTITUDE STABILIZATION

Personal Author(s):

BUCHHEIM,R W

Report Date:

04 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0123557

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MOTION OF A SMALL BODY IN EARTH-MOON SPACE

Personal Author(s):

BUCHHEIM,R W

Report Date:

04 Jun 1956

Media Count:

1 Page(s)

Report Number(s):

RM-1726

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112405

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE HYPERSONIC LIFT AND DRAG DUE TO LIFT OF DELTA AND RECTANGULAR WINGS

Personal Author(s):

RAYMOND, J L

Report Date:

Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0109936

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME PHYSICAL QUALIFICATIONS FOR RELIABILITY FORMULAS

Personal Author(s):

HOWARD, W J

Report Date:

01 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133041

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LUNAR INSTRUMENT CARRIER. ASCENT FLIGHT MECHANICS

Personal Author(s):

LIESKE,H A

Report Date:

Jun 1956

Media Count:

59 Page(s)

Report Number(s):

RM-1727

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112400

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LUNAR INSTRUMENT CARRIER. POWERED FLIGHT GUIDANCE

Personal Author(s):

FRYE,W E

Report Date:

Jun 1956
Media Count:
29 Page(s)
Report Number(s):
RM-1729
Contract Number:
AF 33(038)6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0112388
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) LUNAR INSTRUMENT CARRIER TRACKING AND COMMUNICATION
Personal Author(s):
GABLER,R T
O'MARA,H R
Report Date:
Jun 1956
Media Count:
49 Page(s)
Report Number(s):
RM-1731
Contract Number:
AF 33(038)6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0109935

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GAMES WITH PAYOFF DISCONTINUITIES AT DISCRETE POINTS

Personal Author(s):

GROSS,OLIVER

Report Date:

01 Jun 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0102808

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ABSORPTION AND EMISSION COEFFICIENTS OF AIR AT 6000 DEGREES K AND 8000 DEGREES K OF INTEREST FOR THE DETECTION OF THE ICBM.

Personal Author(s):

MEYEROTT,ROLAND E

Report Date:

29 May 1956

Media Count:

5 Page(s)

Report Number(s):

RM-1721

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

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AD0115366

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/115366.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PERFORMANCE OF THE "DOUBLE-THRESHOLD" RADAR RECEIVER IN THE PRESENCE OF INTERFERENCE

Personal Author(s):

Linder, I W , Jr

Swerling, P

Report Date:

28 May 1956

Media Count:

83 Page(s)

Report Number(s):

RM-1719-5-28-56

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

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Distribution Statement:

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Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington,
DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0117482

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE OPTIMIZATION OF NOZZLE AREA RATIO FOR ROCKETS OPERATING IN A VACUUM

Personal Author(s):

GOLDSMITH,M

Report Date:

24 May 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224965

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE THEORY OF MIXTURE PREPARATION IN CONTINUOUSLY BURNING COMBUSTION CHAMBERS
(PARTS I AND II).

Personal Author(s):

Sanger ,Eugen

Goldsmith,M
Report Date:
22 May 1956
Media Count:
93 Page(s)
Report Number(s):
T60
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0112393
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) A MISSILE FOR PRODUCING FALSE RADAR TARGETS
Personal Author(s):
KIRKWOOD, R L
RAYMOND, J L
STIMPSON, L D
Report Date:
21 May 1956
Media Count:
45 Page(s)
Report Number(s):
RM-1716
Contract Number:
AF 33(038)-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111635

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PRIMAL-DUAL ALGORITHM

Personal Author(s):

DANTZIG,G B

FORD,L R JR

FULKERSON,D R

Report Date:

09 May 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0338888

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CONSIDERATIONS IN THE DESIGN OF INTERCEPTOR DELIVERED ATOMIC-WARHEAD GUIDED MISSILES

Descriptive Note:

Research memo.

Personal Author(s):

Sargeant, M J

Tatum, F A

Report Date:

08 May 1956

Media Count:

95 Page(s)

Report Number(s):

RAND/RM-1706

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; MAY 1956. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: RAND Project Office, Washington, DC 20330. Restricted Data. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116584

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ALTERNATIVE AIRFIELD AND OTHER SITE LOCATIONS IN SELECTED AREAS OF NORTHERN QUEBEC

Report Date:

07 May 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0222636

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/222636.pdf

Size: 505 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE MOON ROCKET

Personal Author(s):

CLEMENT, GEORGE H

Report Date:

07 May 1956

Media Count:

24 Page(s)

Report Number(s):

RAND-P-833

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 7 May 1956. Other requests shall be referred to Department of Defense, Attn: Public Affairs Office, Washington, DC 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0098300

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A RE-EVALUATION OF BERYLLIUM AS A POTENTIAL STRUCTURAL MATERIAL FOR USE IN FLIGHT VEHICLES

Descriptive Note:

Research memo.,

Personal Author(s):

MICKS,W R

HOFFMAN,G A

Report Date:

07 May 1956

Media Count:

43 Page(s)

Report Number(s):

RM-1642

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0105407

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HYPERSONIC, NON-VISCOUS FLOW AROUND A CIRCULAR DISK NORMAL TO THE STREAM

Personal Author(s):

SERBIN,H

Report Date:

03 May 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0115367

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) POSSIBLE USE OF WAVE COMPRESSORS IN NUCLEAR ROCKET PROPULSION REACTOR CYCLES TO INCREASE THE SPECIFIC IMPULSE

Personal Author(s):

AUGENSTEIN,B N

Report Date:

01 May 1956

Media Count:

13 Page(s)

Report Number(s):

RM-1740

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112517

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AMPLITUDES OF THERMAL VIBRATION AT FUSION

Personal Author(s):

GILVARRY,J J

Report Date:

01 May 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114192

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/114192.pdf

Size: 910 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MOTION OF OBJECTS EJECTED FROM AN ICBM OR A SATELLITE VEHICLE

Descriptive Note:

Research memo.

Personal Author(s):

FRICK, RICHARD H

Report Date:

01 May 1956

Media Count:

32 Page(s)

Report Number(s):

RM-1701

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; May 1956. Other requests shall be referred to Headquarters, Department of the Air Force, Attn: Rand Project Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0105966

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE CONCENTRATION OF ESSENTIAL PERSONNEL IN AMERICAN CITIES

Personal Author(s):

ROWAN, MARGARET BRIGHT

MARUYAMA, TAKUYA

Report Date:

01 May 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0105533

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GENERAL REPORT ON THE LUNAR INSTRUMENT CARRIER.

Personal Author(s):

BUCHHEIM, R W

Report Date:

May 1956

Media Count:

57 Page(s)

Report Number(s):

RM-1720

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112376

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INCREASE IN AIRPLANE RANGE AND RADIUS FROM USE OF HIGH-ENERGY FUELS OF HYDROCARBON-LIKE DENSITY

Personal Author(s):

WECHSLER, J W

Report Date:

May 1956

Media Count:

14 Page(s)

Report Number(s):

RM-1699

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112375

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE INFLUENCE OF ETHYLDECABORANE ON CERTAIN WEAPONS AND OPERATIONS OF THE U. S. AIR DEFENSE SYSTEM.

Report Date:

May 1956

Media Count:

27 Page(s)

Report Number(s):

RM-1694

Contract Number:

AF 33-038-6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111941

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EMPIRICAL INVESTIGATION OF CAMBER FOR SUPERSONIC AIRPLANE DESIGN

Personal Author(s):

SKAVDAHL,H

Report Date:

May 1956

Media Count:

1 Page(s)

Report Number(s):

RM-1715

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311466

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) LIMITED WAR IN BURMA: BURMA-2, (AND VARIATIONS)

Descriptive Note:

Research memo.

Personal Author(s):

Paxson, E W

Cone, W

Goodpasture, R A

Reinhardt, G C

Strother, K C

Report Date:

30 Apr 1956

Media Count:

108 Page(s)

Report Number(s):

RAND/RM-2041

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1956. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Project Rand Office, Washington, DC 20330. Document partially illegible. Formerly Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0095542

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMUNICATION NETWORKS. I. OPTIMAL DESIGN AND UTILIZATION

Personal Author(s):

KALABA,R E

JUNCOSA,M L

Report Date:

23 Apr 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116583

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VULNERABILITY OF FUEL STORAGE TANKS TO NUCLEAR BLAST: MOTION OF LIQUID SURFACE IN AN OPEN RECTANGULAR TANK

Personal Author(s):

GORE, L A

Report Date:

20 Apr 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116588

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONSIDERATIONS OF SHORT - AND VERTICAL-TAKE-OFF AIRCRAFT WITH PARTICULAR APPLICATION TO TACTICAL OPERATION IN PERIPHERAL WARS

Personal Author(s):

SCHAMBERG, R

Report Date:

12 Apr 1956

Media Count:

39 Page(s)

Report Number(s):

S-37

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114189

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Study of the Use of Ethyldecaborane in the B-52C,

Personal Author(s):

KELBER,C C

JOHNSTON,R B

Report Date:

09 Apr 1956

Media Count:

14 Page(s)

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0093541
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ESTIMATE OF PRESSURE EFFECTS ON NO-BAND LINES
Personal Author(s):
MARGENAU,HENRY
Report Date:
03 Apr 1956
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0102059
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) THE SOVIET UNION AND THE ATOM: THE EARLY YEARS
Personal Author(s):
RUGGLES, M J
KRAMISH, A
Report Date:
02 Apr 1956
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE
Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112281

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CHARACTERISTICS OF A FAMILY OF VERTICAL-TAKE-OFF-AND-LANDING FIGHTER AIRCRAFT.

Personal Author(s):

SMITH,G K

Report Date:

Apr 1956

Media Count:

37 Page(s)

Report Number(s):

RM-1666

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356161

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUGGESTED ENGINE REPLACEMENT FOR THE B-47

Personal Author(s):

Lutz,R J
Oliver,E P
Woodworth,L R
Report Date:
01 Apr 1956
Media Count:
35 Page(s)
Report Number(s):
RM1679
Report Classification:
Unclassified
Distribution Limitation(s):
03 - U.S. GOVT. ONLY; DOD CONTROLLED
Distribution Statement:
Distribution: USGO: others to Director of Planning, AFRDP, USAF, Washington, D. C.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0108748
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/108748.pdf
Size: 470 KB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) SKIN TEMPERATURE VARIATION DURING REENTRY OF SCIENTIFIC SATELLITE
Personal Author(s):
MASSON, D J
Report Date:
30 Mar 1956
Media Count:
13 Page(s)
Report Number(s):
RM-1693
XC-USAF
Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 30 MAR 1956. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0107151

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BRIEF INVESTIGATION OF THE POSSIBILITY OF INCREASING THE RANGE OF AIRCRAFT BY DROPPING UNNECESSARY PARTS IN FLIGHT

Personal Author(s):

KIRKWOOD,T F

Report Date:

26 Mar 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356160

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COSTS OF ALTERNATIVE METHODS OF OPERATING THE INTERMEDIATE RANGE BALLISTIC MISSILE

Personal Author(s):

Margolis ,M A

O'Sullivan ,J J

Heuston ,M C

Haven,E J

Report Date:

26 Mar 1956

Media Count:

56 Page(s)

Report Number(s):

RM1663

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: USGO: others to Director of Planning, AFRDP, USAF, Washington, D. C.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0105408

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SURFACE-PROTECTION AND COOLING SYSTEMS FOR HIGH-SPEED FLIGHT

Personal Author(s):

MASSON,D J

GAZLEY,C JR

Report Date:

23 Mar 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0095138

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRODUCTION OF FOOD CROPS IN MAINLAND CHINA: PREWAR AND POSTWAR

Personal Author(s):

TWANMO,CHONG

Report Date:

22 Mar 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224382

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

22 Mar 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341089

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUNLAMP CALCULATIONS

Personal Author(s):

Latter,R

Latter,A

Report Date:

20 Mar 1956

Media Count:

11 Page(s)

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0096016

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COLLECTIVE LEADERSHIP AND THE POLITICAL POLICE IN THE SOVIET UNION

Personal Author(s):

BERNAUT, ELSA

RUGGLES, MELVILLE J

Report Date:

15 Mar 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0100023

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMAL SEQUENTIAL TESTING

Personal Author(s):

JOHNSON,S M

Report Date:

15 Mar 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0096905

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTERCEPTOR WEAPON SYSTEMS FOR 1965: DESIGN AND PERFORMANCE METHODS FOR A FAMILY OF 2.0 MACH NUMBER INTERCEPTOR AIRPLANES

Personal Author(s):

CARTAINO,T F

Report Date:

14 Mar 1956

Media Count:

22 Page(s)

Report Number(s):

RM-1657

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356158

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AEROBALLISTIC TRAJECTORIES FOR AN ICBM INTERCEPTOR

Personal Author(s):

Garber,T B

Report Date:

13 Mar 1956
Media Count:
72 Page(s)
Report Number(s):
RM1653
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0098631
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE INFLUENCE OF AN AGGRESSOR'S ATTACK EFFECTIVENESS UPON THE CHARACTERISTICS DESIRED
FOR A DEFENDER'S AIR FORCE
Personal Author(s):
STURDEVANT,C V
Report Date:
12 Mar 1956
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0096904
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THEORY OF THE TUNNEL ANTENNA
Personal Author(s):
HOFFMAN,W C
Report Date:
09 Mar 1956
Media Count:
29 Page(s)
Report Number(s):
RM-1651
Contract Number:
AF 33(038)6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0092502
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/092502.pdf
Size: 407 KB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) APPROXIMATE THERMODYNAMIC PROPERTIES OF COMPRESSED HYDROGEN GAS FROM 5000 TO 12,000 K
Personal Author(s):
Gilmore, F R
Report Date:
07 Mar 1956

Media Count:

11 Page(s)

Report Number(s):

RAND-RM-1650

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 07 MAR 1956. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0130435

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNDAMENTALS OF INFRARED FOR MILITARY APPLICATIONS

Personal Author(s):

BALLARD,STANLEY S

LARMORE,LEWIS

PASSMAN,SIDNEY

Report Date:

Mar 1956

Media Count:

127 Page(s)

Report Number(s):

R-297

Contract Number:

AF 18(600)-1600

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0092290
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE ROLE OF THE MILITARY IN RECENT SOVIET POLITICS
Personal Author(s):
GARTHOFF,R L
Report Date:
01 Mar 1956
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0108747
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A MAN-MACHINE STUDY. AN AIR DEFENSE EXAMPLE: THE COBRA EXPERIMENT.
Descriptive Note:
Research memo.
Personal Author(s):
CHAPMAN,ROBERT L

Report Date:

Mar 1956

Media Count:

185 Page(s)

Report Number(s):

RM-1427

Contract Number:

AF 33(038)6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114182

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THEORETICAL PERFORMANCE OF AN IDEALIZED TERMINAL GUIDANCE SYSTEM FOR AN ANTI-ICBM
DEFENSE SYSTEM

Personal Author(s):

SMITH,F T

Report Date:

01 Mar 1956

Media Count:

73 Page(s)

Report Number(s):

RM-1619

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112408

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COSTS OF ALTERNATIVE METHODS OF OPERATING THE INTERMEDIATE RANGE BALLISTIC MISSILE
(ABRIDGED EDITION)

Personal Author(s):

MARGOLIS,M A

O'SULLIVAN,J J

Report Date:

Mar 1956

Media Count:

50 Page(s)

Report Number(s):

RM-1850

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112931

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUTURE STRATEGIC-BOMBER POSSIBILITIES

Personal Author(s):

KIRKWOOD,T F

SCHAIRER,R S
WEBER,C M
Report Date:
Mar 1956
Media Count:
261 Page(s)
Report Number(s):
R-293
Contract Number:
AF 18(600)-1600
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0105534
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE ALLOCATION OF MATS AIRLIFT - JANUARY 1956 - PACIFIC OCEAN AREA
Personal Author(s):
MANNE,ALAN S
Report Date:
Mar 1956
Media Count:
37 Page(s)
Report Number(s):
RM-1658
Contract Number:
AF 33(038)-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224380

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC DEVELOPMENT AND THE RATE OF INTEREST UNDER DICTATORIALC CONDITIONS.

Personal Author(s):

Leibenstein,H

Report Date:

28 Feb 1956

Media Count:

27 Page(s)

Report Number(s):

P-808

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0092288

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/092288.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GRAPHICAL DETERMINATION OF BALLISTIC TRAJECTORIES THROUGH OUTER SPACE WITH COMPASS AND STRAIGHTEDGE

Personal Author(s):

FRICK, RICHARD H

Report Date:

24 Feb 1956

Media Count:

53 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational use; .
Other requests shall be referred to 24 Feb 1956.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0089708

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMAL TACTICS IN AIR CAMPAIGNS WITH RANDOM OUTCOMES

Personal Author(s):

DRESHER,M

Report Date:

24 Feb 1956

Media Count:

20 Page(s)

Report Number(s):

RM-1645

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0092506

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/092506.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE RELATION OF AIRCRAFT STATUS DATA TO THE LOGISTICS SYSTEM

Descriptive Note:

Research memo.

Personal Author(s):

Geisler, M A

Mirkovich, A R

Report Date:

21 Feb 1956

Media Count:

66 Page(s)

Report Number(s):

RM-1640

XC-AFRDC

Contract Number:

AF 33(038)-6413D

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 21 FEB 1956. Other requests shall be referred to Air Force Research and Development Command, Attn: Project RAND, Pentagon, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224379

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

20 Feb 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356157

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESTIMATES OF SOVIET AIR FORCE EXPENDITURES, 1955-1960

Personal Author(s):

Sanchez,L R

Report Date:

20 Feb 1956

Media Count:

8 Page(s)

Report Number(s):

RM1646

Contract Number:

AF49 638 700

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0092501

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/092501.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A CONCEPT OF MECHANIZED TRANSPORTATION DATA PROCESSING

Personal Author(s):

Clark, A J

Report Date:

20 Feb 1956

Media Count:

54 Page(s)

Report Number(s):

RAND-RM-1647

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 20 FEB 1956. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0099299

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPLICATION OF ANALYTICAL GAMING TECHNIQUES TO THE DETERMINATION OF WEAPON ALLOCATION IN MANEUVERS (EXERCISE SAGE BRUSH

Personal Author(s):

LIND,J R

BERKOVITZ,L D

SISKA,C P

Report Date:

15 Feb 1956

Media Count:

38 Page(s)

Report Number(s):

RM-1649

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: NO FORN, Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0093455

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/093455.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NEWOTNIAN FLOW THEORY FOR SLENDER BODIES

Descriptive Note:

Research memo.

Personal Author(s):

COLE, J D

Report Date:

13 Feb 1956

Media Count:

36 Page(s)

Report Number(s):

RAND-RM-1633

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 13 FEB 1956. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0089709

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR ON MILITARY AFFAIRS, 1945-1952. A SELECTED, ANNOTATED LIST OF ARTICLES IN THE SOVIET MILITARY NEWSPAPER

Personal Author(s):

DALLIN,ALEXANDER

Report Date:

10 Feb 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0095292

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXPECTED DAMAGE FROM SINGLE AND MULTIPLE BOMBS TO TARGETS DISTRIBUTED UNIFORMLY AROUND A CIRCLE

Personal Author(s):

STURDEVANT,C V

Report Date:

09 Feb 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114190

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SOVIET TARGET COMPLEX FOR STRATEGIC SYSTEMS STUDIES

Personal Author(s):

OLIVER,E P

WILSON,J A

Report Date:

07 Feb 1956

Media Count:

1 Page(s)

Report Number(s):

RM-1683

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0102054

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WEIGHT-FEASIBILITY CALCULATION FOR SHIELDING OF TRUCK PASSENGERS

Personal Author(s):

HARRIS,T E

Report Date:

03 Feb 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114191

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SOVIET TARGET COMPLEX FOR STRATEGIC SYSTEMS STUDIES BASE-TO-TARGET DISTANCES

Personal Author(s):

OLIVER,E P

WILSON,J A

Report Date:

02 Feb 1956

Media Count:

237 Page(s)

Report Number(s):

RM-1683

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114186

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF PRE-MANEUVER CAMPAIGN ANALYSIS AND ACTUAL MANEUVER PLAY OF THE AIR WAR IN EXERCISE SAGE BRUSH. PHASE III AND V

Personal Author(s):

LING,J R

BERKOVITZ,L D

SISKA,C P

Report Date:

01 Feb 1956

Media Count:

51 Page(s)

Report Number(s):

RM-1627

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114187

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

ELLIS,J W JR

STURDEVANT,C V

Report Date:

Feb 1956

Media Count:

1 Page(s)

Report Number(s):

RM-1628

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114188

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RESULTS OF AN ANALOG SIMULATION STUDY OF A PROPORTIONAL NAVIGATION TERMINAL
GUIDANCE SYSTEM

Personal Author(s):

ROWELL,L N

Report Date:

Feb 1956

Media Count:

56 Page(s)

Report Number(s):

RM-1635

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114184

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN EARLY PENETRATION SYSTEM FOR STRATEGIC AIR OPERATIONS

Personal Author(s):

JENKINS, J L

Report Date:

Feb 1956

Media Count:

37 Page(s)

Report Number(s):

RM-1625

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224933

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FLUID HALF SPACE UNDER A MECHANICAL INFLUENCE ON ITS SURFACE (TWO DIMENSIONAL PROBLEM).

Personal Author(s):

Sauter ,Fritz

Lang,H A

Report Date:

31 Jan 1956

Media Count:

10 Page(s)

Report Number(s):

T56

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087966

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A TECHNIQUE FOR OPTIMAL DISTRIBUTION OF AVAILABLE STOCKS TO BASES

Personal Author(s):

CLARK,A J

Report Date:

30 Jan 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087890

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SUPPLY OF AN INTERCEPTOR WING DURING THE KOREAN WAR

Personal Author(s):

CONNOLLY, J J

Report Date:

25 Jan 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087889

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) FORCES FOR CHANGE IN SOVIET SOCIETY

Personal Author(s):

TUCKER, ROBERT C

Report Date:

25 Jan 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114180

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME LOGISTIC AND COST CONSIDERATIONS IN MILITARY OPERATION OF WATER-BASED AIRCRAFT

Descriptive Note:

Research memo.

Personal Author(s):

SMITH, R W

Report Date:

25 Jan 1956

Media Count:

24 Page(s)

Report Number(s):

RAND/RM-1594-1

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution: Controlled: All requests to Cmdr, Hq. USAF, Attn: STINFO, Washington, DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114181

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) AN APPROACH TO BOMBING EQUIPMENT REQUIREMENTS
Personal Author(s):
BAILEY,H H
Report Date:
23 Jan 1956
Media Count:
37 Page(s)
Report Number(s):
RM-1616
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
Distribution Statement:
Distribution: NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0114185
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) COMPARISON OF TURBOFAN AND TURBOJET ENGINES AS POWER PLANTS FOR VTOL INTERCEPTORS
Personal Author(s):
BLAKESLEE,D J
Report Date:
23 Jan 1956
Media Count:
35 Page(s)
Report Number(s):
RM-1626
Contract Number:
AF 33(038)-6413
Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356162

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME PRELIMINARY COMPARISONS OF FALLOUT FROM VARIOUS WEAPONS (U)

Personal Author(s):

Augenstein, B W

Report Date:

20 Jan 1956

Media Count:

17 Page(s)

Report Number(s):

RM1734

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified requesters shall obtain release approval from Director of Planning, AFRDP, Hq., USAF, Wash. 25, D. C. Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0089228
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON THE DESIGN OF HIGH-RESOLUTION AIRBORNE RADARS
Personal Author(s):
BAILEY,H H
Report Date:
20 Jan 1956
Media Count:
13 Page(s)
Report Number(s):
RM-1622
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0087961
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) ALTERNATIVE TRANSPORTATION SYSTEMS FOR ZI MOVEMENTS OF AIRCRAFT SPARES AND ENGINES
Personal Author(s):
JOHNSON, ROBERT E
Report Date:
17 Jan 1956
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087888

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ALLOCATIONG MATS EQUIPMENT WITH THE AID OF LINEAR PROGRAMMING

Personal Author(s):

MANNE,ALAN S

Report Date:

16 Jan 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0092505

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/092505.pdf

Size: 792 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE EFFECT OF SPEED ON BOMB-RUN GROUND TRACKS AND RUN TIMES

Personal Author(s):

SHARKEY, E H

Report Date:

13 Jan 1956

Media Count:

30 Page(s)

Report Number(s):

RAND-RM-1610

XC-USAF

Contract Number:

AF 33-038-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 13 FEB 1956. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0092503

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/092503.pdf

Size: 260 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MIN-MAX THEOREMS ON SHORTEST CHAINS AND DISJUNCT CUTS OF A NETWORK

Personal Author(s):

Robacker, J T

Report Date:

12 Jan 1956

Media Count:

11 Page(s)

Report Number(s):

RAND-RM-1660

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 12 JAN 1956. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341378

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RADIOACTIVE CONTAMINATION FROM A MULTIBOMB CAMPAIGN

Personal Author(s):

Greenfield,S M

Report Date:

06 Jan 1956

Media Count:

32 Page(s)

Report Number(s):

RM1607

Report Classification:

SECRET

Distribution Limitation(s):

13 - U.S. GOVT. ONLY; NON-DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only government agencies may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133028

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RADIOACTIVE CONTAMINATION FROM A MULTI-BOMB CAMPAIGN

Personal Author(s):

GREENFIELD,S M

Report Date:

06 Jan 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090551

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF SOVIET AND UNITED STATES RETAIL PRICES FOR MANUFACTURED GOODS AND SERVICES IN 1950

Personal Author(s):

WAINSTEIN,ELEANOR S

Report Date:

05 Jan 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0115220

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MONOPOLGS. AN INVENTORY MANAGEMENT GAME

Personal Author(s):

HAMBURGER,WILLIAM

Report Date:

03 Jan 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114183

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BRIEF STUDY OF THE B-58 MISSION WITH ETHYLDECABORANE FUEL.

Personal Author(s):

KELBER,C C
WECHSLER,J W
Report Date:
02 Jan 1956
Media Count:
21 Page(s)
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED
Distribution Statement:
Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0116582
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) APPROXIMATE THERMODYNAMIC AND RADIATION PROPERTIES OF AIR BETWEEN 2 AND 600 VOLTS
Personal Author(s):
GILMORE, F R
LATTER, A L
Report Date:
Jan 1956
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112412

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTERNATIONAL COMMUNICATION AND POLITICAL OPINION: A GUIDE TO THE LITERATURE

Personal Author(s):

SMITH,BRUCE L

SMITH,CHITRA M

Report Date:

Jan 1956

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340550

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MISSILE SYSTEM FOR DEFENSE AGAINST THE ICBM

Personal Author(s):

White,W B

Blumenthal,I S

Report Date:

30 Dec 1955

Media Count:

141 Page(s)

Report Number(s):

RM1601

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0093459

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A SURVEY OF EXISTING METHODS FOR REDUCING THE DRAG-DUE-TO-LIFT AT SUPERSONIC SPEEDS
FOR PLANAR SYSTEMS

Personal Author(s):

WILLMARTH, W W

Report Date:

30 Dec 1955

Media Count:

36 Page(s)

Report Number(s):

RAND/RM-1611

XC-AFRDC

Contract Number:

AF 33(038)-6413

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff Research and Development (Air Force), Attn: RAND
Project Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111639

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME OBSERVATIONS ON THE MAXIMIZATION OF STIELTJETS INTEGRALS

Personal Author(s):

ROBACKER,J T

Report Date:

30 Dec 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090545

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLE ALGORITHM FOR FINDING MAXIMAL NETWORK FLOWS AND AN APPLICATION TO THE HITCHCOCK PROBLEM

Personal Author(s):

FORD,L R JR

FULKERSON,D R

Report Date:

29 Dec 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224376

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLE ALGORITHM FOR FINDING MAXIMAL NETWORK FLOWS AND AN APPLICATION TO THE
HITCHCOCK PROBLEM,

Personal Author(s):

Ford,L R ,Jr

Fulkerson,D R

Report Date:

29 Dec 1955

Media Count:

21 Page(s)

Report Number(s):

P743

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087964

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE CONVERGENCE OF DISCRETE STOCHASTIC DECISION PROCESSES TO THEIR CONTINUOUS ANALOGUES. II

Personal Author(s):

OSBORN, HOWARD

Report Date:

19 Dec 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144290

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PHYSICAL ENVIRONMENT OF THE QUOICH RIVER AREA NORTHWEST TERRITORIES, CANADA

Report Date:

17 Dec 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339897

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DEFENSE AGAINST INTERCONTINENTAL BALLISTIC MISSILES

Descriptive Note:

Staff rept.

Report Date:

15 Dec 1955

Media Count:

18 Page(s)

Report Number(s):

RAND/R-284

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; DEC 1955. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: RAND Project Office, Washington, DC 20330. Restricted Data. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340557

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROJECT RAND

Descriptive Note:

Staff rept.

Report Date:

15 Dec 1955

Media Count:

42 Page(s)

Report Number(s):

R288

Contract Number:

AF33 038 6413

AF18 600 1600

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356156

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MEASUREMENT OF DISTRIBUTION OF RADIOACTIVITY AND AIR FLOW IN A YOUNG ATOMIC CLOUD

Descriptive Note:

Y W. W.

Report Date:

14 Dec 1955

Media Count:

21 Page(s)

Report Number(s):

RM1620

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

51 - RESTRICTED DATA

Distribution Statement:

Release or announcement to foreign governments or their nationals is not authorized. Availability:
Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0093457

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALOG SIMULATION OF THE ICBM INTERCEPTION PROBLEM

Personal Author(s):

SMITH,F T

ROWELL,L N

Report Date:

08 Dec 1955

Media Count:

59 Page(s)

Report Number(s):

RM-1597

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356155

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INFLUENCE OF DECOY GUIDANCE ON NUMBER OF DECOYS REQUIRED IN A BOMBING ATTACK

Personal Author(s):

Dadant,P M

Report Date:

08 Dec 1955

Media Count:

34 Page(s)

Report Number(s):

RM1599

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0356154

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SATURATION EFFECTS OF DECOYS IN A BOMBING ATTACK

Personal Author(s):

Dadant,P M

Report Date:

07 Dec 1955

Media Count:

20 Page(s)

Report Number(s):

RM1596

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112407

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MANPOWER PLANNING FACTORS FOR UNDERGROUND ICBM (ABRIDGED EDITION)

Personal Author(s):

HEUSTON,M C

Report Date:

05 Dec 1955

Media Count:

44 Page(s)

Report Number(s):

RM-1849

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0093456

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/093456.pdf

Size: 6 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BASIC SUPERSONIC RAMJET POINT-DESIGN PERFORMANCE

Descriptive Note:

Research memo.

Personal Author(s):

Young, G B

Report Date:

05 Dec 1955

Media Count:

55 Page(s)

Report Number(s):

RM-1615

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 05 DEC 1955. Other requests shall be referred to Department of the Air Force, ATTN: Public Affairs Office, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0342406

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MANPOWER PLANNING FACTORS FOR UNDERGROUND ICBM

Personal Author(s):

Heuston,M C

Report Date:

05 Dec 1955

Media Count:

44 Page(s)

Report Number(s):

RM1595

Report Classification:

SECRET

Distribution Limitation(s):

14 - DOD ONLY; NON-DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0130687

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STEADY NUCLEAR COMBUSTION IN ROCKETS

Personal Author(s):

SANGER,E

Report Date:

01 Dec 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADC062384

Corporate Author:

RAND CORP SANTA MONICA CA

Descriptive Note:

Staff rept.

Report Date:

01 Dec 1955

Media Count:

39 Page(s)

Report Number(s):

RAND/R-286

XC-USAF

Contract Number:

AF33(038)-6413

Monitor Series:

USAF

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution: Further dissemination only as directed by Dept. of the Air Force, Washington, DC 20330 (Dec 55) or higher DoD authority.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224377

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

30 Nov 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087885

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STEAM LOCOMOTIVE AVAILABILITY AND TERMINAL FACILITIES

Personal Author(s):

MCGUIRE,C B

Report Date:

28 Nov 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114179

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Refueled and Unrefueled Radius of the B-47E using Ethyldecaborane High-Energy Fuel.

Personal Author(s):

WECHSLER,J W

Report Date:

10 Nov 1955

Media Count:

18 Page(s)

Report Number(s):

RM-1591

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0133972

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE PROBLEM OF COOLING ATOMIC ROCKETS WHICH UTILIZE THERMONUCLEAR REACTIONS

Personal Author(s):

KAEPPELER,H J

Report Date:

01 Nov 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087887

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CONTEXTUAL MAP

Personal Author(s):

KENNEDY,JOHN L

Report Date:

24 Oct 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087882

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EQUATION OF STATE OF WATER ON THE THOMAS-FERMI MODEL

Personal Author(s):

LATTER,A

LATTER,R

Report Date:

24 Oct 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0138447

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MOTION OF A SATELLITE STATION AROUND THE EARTH IN AN ELLIPTICAL ORBIT INCLINED TO THE EARTH'S EQUATOR

Personal Author(s):

KRAUSE,HELMUT

Report Date:

21 Oct 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114176

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INFRARED TECHNIQUES APPLIED TO THE DETECTION AND INTERCEPTION OF INTERCONTINENTAL BALLISTIC MISSILES

Descriptive Note:

Research memo.,

Personal Author(s):

KELLOGG,WILLIAM W

PASSMAN,SIDNEY

Report Date:

21 Oct 1955

Media Count:

64 Page(s)

Report Number(s):

RM-1572 2

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354462

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUGGESTED PRIORITIES FOR DEVELOPMENT AND USE OF ELECTRONIC RECONNAISSANCE
EQUIPMENT

Personal Author(s):

Raymond,R C

Keith,P C

Report Date:

19 Oct 1955

Media Count:

16 Page(s)

Report Number(s):

RM-1577

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224383
Corporate Author:
RAND CORP SANTA MONICA CALIF
Report Date:
15 Oct 1955
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0354461
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) GENERALIZED CHARACTERISTICS OF INTERCEPTORDELIVERED, UNGUIDED, NUCLEAR-WARHEAD
ROCKETS
Personal Author(s):
Sargeant,M J
Report Date:
10 Oct 1955
Media Count:
30 Page(s)
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RM-1580
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SECRET
Distribution Limitation(s):
03 - U.S. GOVT. ONLY; DOD CONTROLLED
51 - RESTRICTED DATA
Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified re-questers shall obtain release approval from Development Planning, U. S. Air Force, Wash. 25, D. C. Attn: AFRDP. Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114175

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WIND ERRORS IN DEAD RECKONING NAVIGATION

Descriptive Note:

Research memo.,

Personal Author(s):

RAPP, R R

Report Date:

03 Oct 1955

Media Count:

12 Page(s)

Report Number(s):

RM-1565

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: No Foreign.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087817

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A STUDY OF THE GROWTH POTENTIAL OF AGRICULTURE OF THE U.S.S.R.

Personal Author(s):

JOHNSON,D G

Report Date:

03 Oct 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087884

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET REACTORS DESCRIBED AT THE 1955 GENEVA CONFERENCE ON THE PEACEFUL USES OF ATOMIC ENERGY

Personal Author(s):

SAFONOV, G

Report Date:

Oct 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087818

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRESSURE DRAG AT ZERO LIFT FOR ROUNDED LEADING EDGE WINGS IN THE PRESENCE OF BODIES

Personal Author(s):

SKAVDAHL,H

Report Date:

Oct 1955

Media Count:

37 Page(s)

Report Number(s):

RM-1562

Contract Number:

AF33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution: Futher dissemination only as directed by Rand Co. Santa Monica, Ca.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114178

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRE-MANEUVER CAMPAIGN ANALYSIS OF THE AIR WAR IN EXERCISE SAGE BRUSH, PHASES III AND V

Personal Author(s):

LIND,J R

SISKA,C P

Report Date:
30 Sep 1955
Media Count:
32 Page(s)
Report Number(s):
RM-1582
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED
Distribution Statement:
Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0090546
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A SIMPLE LINEAR PROGRAMMING PROBLEM EXPLICITLY SOLVABLE IN INTEGERS
Personal Author(s):
GROSS, OLIVER
Report Date:
30 Sep 1955
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087815

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ABBREVIATIONS FOR PRICE HANDBOOKS USED IN RAND STUDIES OF THE PRICES OF SOVIET BASIC INDUSTRIAL GOODS

Personal Author(s):

BERGSON,ABRAM

Report Date:

27 Sep 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087814

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE GRUENEISEN PARAMETER FOR AN EINSTEIN SOLID AND UNDER FINITE STRAIN

Personal Author(s):

GILVARRY,J J

Report Date:

26 Sep 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

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AD0092289

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/092289.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AUTOMATIC NAVIGATION AIDED BY INTERMITTENT POSITION FIXES

Personal Author(s):

Swerling, P

Report Date:

25 Sep 1955

Media Count:

49 Page(s)

Report Number(s):

RAND-RM-1564

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

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Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114174

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PREDICTION AND PREDICTION ERRORS FOR ICBM TRAJECTORIES

Personal Author(s):

GABLER,R T

SWERLING,P

VERNON,R E

Report Date:

15 Sep 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087963

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CONDITION FOR THE EXISTENCE OF SADDLEPOINTS

Personal Author(s):

SHAPLEY,L S

Report Date:

14 Sep 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087881

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE SIGNIFICANCE OF MAJOR CYCLE VARIABLES ON TURBOJET ENGINE PERFORMANCE AT MACH 3.0

Personal Author(s):

WOODWORTH, L R

Report Date:

14 Sep 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087812

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A METHOD OF COMPUTING THE DETECTION AND CONVERSION CAPABILITY OF A LEAD-COLLISION-COURSE INTERCEPTOR

Personal Author(s):

JOHNSON, R H

STILLMAN, W P

Report Date:

13 Sep 1955

Media Count:

65 Page(s)

Report Number(s):

RM-1550

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087811

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPENDIUM OF PRESSWORKING OPERATIONS

Personal Author(s):

ROWE,A J

Report Date:

12 Sep 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090552

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOVIET AGRICULTURE SINCE THE SEPTEMBER 1953 REFORMS
Personal Author(s):
NIMITZ,NANCY
Report Date:
05 Sep 1955
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0114167
Corporate Author:
RAND CORP SANTA MONICA CA
Personal Author(s):
HIEBERT, A L
SOLTWEDEL, E B
RAYMOND, R C
Report Date:
Sep 1955
Media Count:
1 Page(s)
Contract Number:
AF 33-038-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114165

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

ELLIS,J W JR

STURDEVANT,C V

Report Date:

Sep 1955

Media Count:

1 Page(s)

Report Number(s):

RM-1467

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114173

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

BAER,D F

Report Date:

Sep 1955

Media Count:

1 Page(s)

Contract Number:

AF 33-038-6413

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114196

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SIGNAL DENSITY STUDY - SURFACE RADAR DEPLOYMENT.

Descriptive Note:

Research memo.,

Personal Author(s):

HIEBERT, A L

SALTWEDEL, E B

RAYMOND, R C

Report Date:

01 Sep 1955

Media Count:

123 Page(s)

Report Number(s):

R-280

Contract Number:

AF 33(038)6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: No Foreign.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0088670

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DILWORTH'S THEOREM ON PARTIALLY ORDERED SETS

Personal Author(s):

HOFFMAN,A J

DANTZIG,G B

Report Date:

26 Aug 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0084052

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUILIBRIUM COMPOSITION AND THERMODYNAMIC PROPERTIES OF AIR TO 24,000 K

Personal Author(s):

GILMORE,F R

Report Date:

24 Aug 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087716

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECTIVENESS OF ALTERNATIVE FLY-AWAY KITS

Personal Author(s):

HAMBURGER, WILLIAM

Report Date:

22 Aug 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087717

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INFORMATION IN GAMES WITH FINITE RESOURCES

Personal Author(s):

GALE, DAVID

Report Date:

18 Aug 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087715

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIMPLE DISTRIBUTION FUNCTIONS FOR INVENTORY CONTROL

Personal Author(s):

HAMBURGER,WILLIAM

Report Date:

17 Aug 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114177

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DEVELOPMENT POSSIBILITIES FOR HIGH-POWER VHF AND UHF TRANSMITTER TUBES

Personal Author(s):

CHODOROW,MARVIN

Report Date:
15 Aug 1955
Media Count:
45 Page(s)
Report Number(s):
RM-1576
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED
Distribution Statement:
Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0114172
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) VULNERABILITY OF BULK AIRCRAFT FUEL STORAGE IN AIR FORCE OVERSEAS INSTALLATIONS
Descriptive Note:
Research memo.
Personal Author(s):
PETER,MARC JR
Report Date:
08 Aug 1955
Media Count:
36 Page(s)
Report Number(s):
RM-1534
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090553

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Symmetric Market Game.

Report Date:

08 Aug 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087549

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DISCRETE APPROXIMATIONS TO SOME DIFFERENTIAL GAMES

Personal Author(s):

FLEMING,W H

Report Date:

08 Aug 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087712

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DETERMINATION OF THE MAXIMAL STEADY STATE FLOW OF TRAFFIC THROUGH A RAILROAD NETWORK

Personal Author(s):

BOLDYREFF,A W

Report Date:

05 Aug 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087548

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONSIDERATIONS PERTINENT TO TACTICAL BALLISTIC MISSILE DEVELOPMENT

Personal Author(s):

ROMIG,E A

BUCHHEIM,R W

Report Date:

02 Aug 1955

Media Count:

25 Page(s)

Report Number(s):

RM-1525

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087713

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRESSURE DRAG AT ZERO LIFT IN PRESENCE OF BODY FOR WINGS WITH SHARP LEADING EDGES

Personal Author(s):

BLAKESLEE,D J

Report Date:

Aug 1955

Media Count:

21 Page(s)

Report Number(s):

RM-1535

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114171

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PROPOSED USAF RESEARCH PROGRAM ON THE TERMINAL VULNERABILITY OF AIRCRAFT AND MISSILES

Personal Author(s):

BAER,D F

KENT,A I

Report Date:

Aug 1955

Media Count:

1 Page(s)

Report Number(s):

RM-1531

Contract Number:

AF33(038)-6413

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087719

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EXPERIMENTAL AND THEORETICAL DOWNWASH FOR PLANAR WINGS IN SUBSONIC AND SUPERSONIC FLOW

Personal Author(s):

RAYMOND, J L

Report Date:

Aug 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087718

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BASE PRESSURES FOR BODIES OF REVOLUTION

Personal Author(s):

RAYMOND, J L

RODDEN, W P

Report Date:

Aug 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087550

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INCIDENTAL DESTRUCTION AROUND A POINT TARGET

Personal Author(s):

RHYNE,R F

MARTIN,K I

Report Date:

Aug 1955

Media Count:

45 Page(s)

Report Number(s):

RM-1528

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087546

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BASIC INDUSTRIAL PRICES IN THE USSR, 1928-1950: TWENTY-FIVE BRANCH SERIES AND THEIR AGGREGATION

Personal Author(s):

BERGSON,ABRAM

BERNAUT,ROMAN

TURGEON,LYNN

Report Date:

01 Aug 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087545

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME EXPERIMENTS ON THE TRAVELING-SALESMAN PROBLEM

Personal Author(s):

ROBACKER,J T

Report Date:

28 Jul 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087720

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONCERNING GROWTH OF THE NUMBER OF DISTINCT CUTS

Personal Author(s):

ELLIS,D O

ROBACKER,J T

Report Date:

27 Jul 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087544

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MODEL OF THE PROCUREMENT-REPAIR DECISION FOR A SPARE ITEM

Personal Author(s):

BERMAN,E B

Report Date:

25 Jul 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087547

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRANSIENT HEAT CONDUCTION IN COMPOSITE SLABS FOR A HEAT FLUX VARYING EXPONENTIALLY WITH TIME

Personal Author(s):

GAZLEY,C

HUTH,J H

HORN,M C

Report Date:

22 Jul 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087543

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A TEST PROGRAM FOR OBTAINING BASIC DATA ON CREEP-BUCKLING STRENGTH OF FLAT PLATE ELEMENTS AT ELEVATED TEMPERATURE

Personal Author(s):

MICKS,W R

Report Date:

20 Jul 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112410

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CRITICALITY AND SOME POTENTIALITIES OF "CAVITY REACTORS" (ABRIDGES)

Personal Author(s):

SAFANOV,GEORGE

Report Date:

17 Jul 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0491411

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/491411.pdf

Size: 988 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE CRITICALITY AND SOME POTENTIALITIES OF CAVITY REACTORS

Descriptive Note:

Research memo.

Personal Author(s):

Safonov, George

Report Date:

17 Jul 1955

Media Count:

27 Page(s)

Report Number(s):

RAND-RM-1520

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116587

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A METHOD OF COMPUTING DETECTION AND CONVERSION CAPABILITY OF A LEAD-COLLISION
COURSE INTERCEPTOR

Personal Author(s):

STILLMAN,W P

Report Date:

14 Jul 1955

Media Count:

29 Page(s)

Report Number(s):

S-33

Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0114170
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THRESHOLD GUIDANCE FOR THE ONE-EYED GOALIE - A POTENTIAL INTERCEPTOR FOR DEFENSE
AGAINST THE ICBM.
Descriptive Note:
Research memo.,
Personal Author(s):
BLUMENTHAL, I S
Report Date:
08 Jul 1955
Media Count:
57 Page(s)
Report Number(s):
RM-1514
Contract Number:
AF 33(038)-6513
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
Distribution Statement:
Distribution: No Foreign.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085479

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) IONIZATION OF RADIOACTIVE PARTICLES IN THE FREE AIR

Personal Author(s):

GREENFIELD,S M

Report Date:

05 Jul 1955

Media Count:

1 Page(s)

Contract Number:

AF 33(038)-6413

AT(11-1)-135

Report Classification:

Unclassified

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0293680

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE BONIN CASE. A GERMAN CONTROVERSY OVER REARMAMENT BY A FORMER GERMAN GENERAL

Report Date:

01 Jul 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087449

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF MACHINE TOOL SUBSTITUTION POSSIBILITIES

Personal Author(s):

ROWE,A J

MARKOWITZ,H

Report Date:

30 Jun 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341109

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEUTRON EFFECTS OF ATOMIC WEAPONS AGAINST THE INTERCONTINENTAL BALLISTIC MISSILE,

Personal Author(s):

ethe,H A

atter,A L

Report Date:

24 Jun 1955

Media Count:

12 Page(s)

Report Number(s):

RM1507

Report Classification:

SECRET

Distribution Limitation(s):

13 - U.S. GOVT. ONLY; NON-DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only government agencies may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087448

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESTIMATE OF AVERAGE ATMOSPHERIC PROPERTIES BETWEEN 500 KM AND 1000 KM

Personal Author(s):

KALLMANN,H K

Report Date:

21 Jun 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087450

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Fighter Patrols in the Air Defense of Peripheral Targets: A Method of Analysis and an Application in the Soviet Environment.

Personal Author(s):

LAVIN,M M

JACKSON,V G

Report Date:

15 Jun 1955

Media Count:

66 Page(s)

Report Number(s):

RM-1515

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087447

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE MAXIMIZATION OF AN INTEGRAL SUBJECT TO CONSTRAINTS

Personal Author(s):

GROSS,OLIVER

SCARF,HERBERT

Report Date:

15 Jun 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114169

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UNITED STATES JET FUEL PRODUCTION CAPABILITIES BEFORE AND AFTER THERMONUCLEAR ATTACK

Personal Author(s):

MANNE,ALAN S

Report Date:

14 Jun 1955

Media Count:

15 Page(s)

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0096717

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF NON-FERROUS METALS IN THE SOVIET UNION, 1928-1950

Personal Author(s):

TURGEON,LYNN

BERGSON,ABRAM

Report Date:

09 Jun 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087444

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCIENTIFIC USE OF AN ARTIFICIAL SATELLITE

Personal Author(s):

KALLMANN,H K

KELLOGG,W W

Report Date:

08 Jun 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0449937

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECT OF MAINTENANCE AND RELIABILITY ON THE OPERATIONAL EFFECTIVENESS OF AN INTERCEPTOR SQUADRON. A CASE STUDY (PROJECT LOCK-ON),

Personal Author(s):

LeValle,R S

Stoller,D S

Report Date:

08 Jun 1955

Media Count:

69 Page(s)

Report Number(s):

RM1499

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087445

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DISCRETE APPROXIMATIONS TO SOME CONTINUOUS DYNAMIC PROGRAMMING PROCESSES

Personal Author(s):

FLEMING,W H

Report Date:

02 Jun 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354463

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPROACH TO BOMBING EQUIPMENT REQUIREMENTS

Personal Author(s):

Bailey,H H

Report Date:

01 Jun 1955

Media Count:

71 Page(s)

Report Number(s):

RM-1493

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified re-questers shall obtain release approval from Directorate of Development Planning, Hq., U. S. Air Force, Wash., D. C. Attn: AFRDP. Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0087446
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOME QUANTITATIVE ASPECTS OF INTERCEPTION
Personal Author(s):
WHITE,W B
Report Date:
Jun 1955
Media Count:
54 Page(s)
Report Number(s):
RM-1502
Contract Number:
AF33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0087542
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) AERODYNAMIC RESEARCH FACILITIES REQUIRED FOR THE DEVELOPMENT OF MODERATE AND LONG-RANGE BALLISTIC MISSILES
Personal Author(s):
GAZLEY, C JR
Report Date:
01 Jun 1955
Media Count:
1 Page(s)
Report Classification:
Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114198

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LIST OF UNCLASSIFIED MATHEMATICS DIVISION PUBLICATIONS, INCLUDING RELATED REPORTS
FROM OTHER DIVISIONS

Report Date:

01 Jun 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090550

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF REFINED PETROLEUM PRODUCTS IN THE U.S.S.R., 1928-1950

Personal Author(s):

NIMITZ,NANCY

BERGSON,ABRAM

Report Date:

26 May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087443

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON NETWORK THEORY

Personal Author(s):

ROBACKER, J T

Report Date:

26 May 1955

Media Count:

20 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors. NOFORN. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087711

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELATIVE MAXIMA IN VARIATIONAL PROBLEMS WITH INEQUALITY CONSTRAINTS

Personal Author(s):

FLEMING,W H

Report Date:

25 May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087442

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EQUATION OF THE FUSION CURVE

Personal Author(s):

GILVARRY,J J

Report Date:

24 May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087441

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUATION OF STATE OF WATER

Personal Author(s):

LATTER,A L

LATTER,R

Report Date:

23 May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087176

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAXIMUM ANGULAR ACCURACY OF A PULSED SEARCH RADAR

Personal Author(s):

SWERLING,P

Report Date:

20 May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090549

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF MISCELLANEOUS BASIC INDUSTRIAL PRODUCTS, USSR, 1928-1950

Personal Author(s):

TURGEON, BERNAUT, ROMAN

BERGSON, ABRAM

Report Date:

19 May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114168

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A PRELIMINARY DISCUSSION OF INTERCONTINENTAL BALLISTIC MISSILE DEFENSE: ABRIDGED EDITION

Personal Author(s):

GRAHAM, W B

Report Date:

16 May 1955

Media Count:

375 Page(s)

Report Number(s):

RM-1495

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090419

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STUDIES IN THE ECONOMICS OF TRANSPORTATION

Personal Author(s):

BECKMANN,MARTIN

MCGUIRE,C B

WINSTEN,CHRISTOPHER B

Report Date:

12 May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

20 - JOURNAL ARTICLES; DTIC USERS ONLY

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087169

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ESTIMATE OF THE ABILITY OF JANUARY 1953 INVENTORIES TO SUPPLY THE CIVILIAN REQUIREMENTS OF A HYPOTHETICAL FULL MOBILIZATION

Personal Author(s):

GROSSE,R N

Report Date:

11 May 1955

Media Count:

13 Page(s)

Report Number(s):

RM-1484

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087170

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BRITAIN AND THE DEFENSE OF WESTERN EUROPE

Personal Author(s):

DEWEERD,H A

Report Date:

10 May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086398

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CARGO DENSITY AND AIR TRANSPORTATION

Personal Author(s):

BICKNER, ROBERT E

Report Date:

10 May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087165

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANALYSIS OF WORLDWIDE DATA ON AIRCRAFT SPARE PARTS AS TO UNIT COST, QUANTITY AND VALUE ISSUED, AND INVENTORY VALUE

Personal Author(s):

GEISLER, M A

MIRKOVICH, A R

Report Date:

06 May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090544

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INDUSTRIAL TRAINING IN THE SOVIET UNION

Personal Author(s):

GALENSON, WALTER

Report Date:

05 May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087161

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/087161.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A BRIEF INVESTIGATION OF UNORTHODOX ATTACKS (MIG-15 VS. B-47 AND B-52)

Personal Author(s):

JENKINS, J L

Report Date:

02 May 1955

Media Count:

47 Page(s)

Report Number(s):

RM-1465

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0079284

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROCEEDINGS OF THE RAND SYMPOSIUM ON HIGH-SPEED IMPACT, JANUARY 31 - FEBRUARY 2, 1955

Personal Author(s):

HUTH, J H

HOLBROOK, R D

DYE, H M

Report Date:

01 May 1955

Media Count:

506 Page(s)

Report Number(s):

S-34

Contract Number:

AF33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution: Further dissemination only as directed by AFELM-RAND, Attn: Chief Research Support,
1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087175

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A PREFERRED METHOD FOR DESIGNING A FLYAWAY KIT

Personal Author(s):

KARR, H W

GEISLER, M A

BROWN, B B

Report Date:

May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0091181

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF 1950 WHOLESALE PRICES IN SOVIET AND AMERICAN INDUSTRY

Personal Author(s):

KAPLAN,NORMAN M

WHITE,WILLIAM L

Report Date:

01 May 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087162

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE VALUE OF AMERICAN MANUFACTURING PLANT AND EQUIPMENT

Personal Author(s):

GROSSE,R N

Report Date:

28 Apr 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111056

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Recent Advances in Linear Programming.

Report Date:

12 Apr 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087163

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PROPOSED MECHANISM OF FATIGUE FAILURE

Personal Author(s):

SHANLEY,F R

Report Date:

11 Apr 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086958

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GRUENEISEN'S LAW AND THE FUSION CURVE AT HIGH PRESSURE

Personal Author(s):

GILVARRY,J J

Report Date:

11 Apr 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086956

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE ELIMINATION FORM OF THE INVERSE AND ITS APPLICATION TO LINEAR PROGRAMMING

Personal Author(s):

MARKOWITZ,HARRY

Report Date:

08 Apr 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086959

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SCIENTIFIC SATELLITE-PAYLOAD CONSIDERATIONS

Personal Author(s):

AUGENSTEIN,B W

Report Date:

08 Apr 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086957

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANALYSIS OF THE FLYING ACTIVITY AND SPARE PARTS DEMAND OF F-86D AIRCRAFT AT PERRIN AIR FORCE BASE, SEPTEMBER 1, 1953-FEBRUARY 28, 1954

Personal Author(s):

GEISLER, M A

MIRKOVICH, A R

Report Date:

06 Apr 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354464

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COSTS OF POSSIBLE ALTERNATIVE METHODS FOR OPERATING THE INTERCONTINENTAL BALLISTIC MISSILE

Personal Author(s):

Springer,J Y

Smith,R W

Margolis,M A

Heuston,M C

Report Date:

05 Apr 1955

Media Count:

78 Page(s)

Report Number(s):

RM-1451

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0088079

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OVERLOAD USAGE OF RUNWAYS: APPLICATION TO TAC AIRCRAFT

Personal Author(s):

ELLIS,J W JR

O'SULLIVAN,J J

STURDEVANT,C V

Report Date:

Apr 1955

Media Count:

29 Page(s)

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090548

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Computation of Maximal Flows in Networks.

Personal Author(s):

FULKERSON,D R

DANTZIG,G B

Report Date:

01 Apr 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114166

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECT OF THRUST AUGMENTATION ON THE TAKE-OFF DISTANCE OF CERTAIN AIRPLANES

Personal Author(s):

SMITH,G K

Report Date:

Apr 1955

Media Count:

17 Page(s)

Report Number(s):

RM-1471

Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED
Distribution Statement:
Distribution: DoD only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0088078
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE POSSIBILITY OF DETECTING SMALL OBJECTS NEAR THE EARTH WITH EXISTING SEARCH
EQUIPMENT
Descriptive Note:
Research memo.
Personal Author(s):
LARMORE,L
Report Date:
Apr 1955
Media Count:
8 Page(s)
Report Number(s):
RM-1468
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114163

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PERFORMANCE OF A SCIENTIFIC SATELLITE

Personal Author(s):

HEFFERN,E C

KOCH,H A

Report Date:

Apr 1955

Media Count:

32 Page(s)

Report Number(s):

RM-1460

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB185167

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Stark Fields from Ions in a Plasma.

Personal Author(s):

Broyles, A A

Report Date:

28 Mar 1955

Media Count:

23 Page(s)

Report Number(s):

RM-1447-AEC

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086954

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE LINDEMANN AND GRUNEISEN LAWS

Personal Author(s):

GILVARRY,J J

Report Date:

23 Mar 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0224374

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

21 Mar 1955

Media Count:

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087164

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CONVERGENCE OF THE DISCRETE ANALOGUES OF DIFFERENTIAL GAMES, PART I

Personal Author(s):

SCARF,HERBERT

Report Date:

18 Mar 1955

Media Count:

1 Page(s)

Report Classification:

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02 - U.S. GOVT. AND THEIR CONTRACTORS

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AD0086714

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View Full Text (pdf)

File: /UL/086714.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) STRATEGIC BOMBARDMENT CAMPAIGNS AND THE EFFECTS OF SOME ELECTRONIC
COUNTERMEASURES

Personal Author(s):

GRAHAM, W B

Report Date:

15 Mar 1955

Media Count:

89 Page(s)

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RAND/RM-1436

XC-AFRDC

Contract Number:

AF 33(038)-6413

Monitor Series:

AFRDC

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Distribution Statement:

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MAR 1955. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air
Force), Directorate of Operational Requirements and Development Plans, Attn: Project Rand Office,
Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0086720
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) STALIN AND THE USES OF PSYCHOLOGY
Personal Author(s):
TUCKER,ROBERT C
Report Date:
10 Mar 1955
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0086715
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) BRITISH PUBLIC STATEMENTS ON WEST EUROPEAN DEFENSE
Personal Author(s):
JOSEPH,JEAN H
Report Date:
01 Mar 1955
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086719

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF THE FFA AND RAND METHODS OF FATIGUE ANALYSIS

Personal Author(s):

SHANLEY,F R

Report Date:

01 Mar 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111055

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BARGAINING:THE HIDDEN HAND IN GOVERNMENT

Personal Author(s):

LINDBLOM,CHARLES E

Report Date:

22 Feb 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086717

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE OPTIMIZATION OF QUADRATIC FUNCTIONS SUBJECT TO LINEAR CONSTRAINTS

Personal Author(s):

MARKOWITZ,HARRY

Report Date:

21 Feb 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086712

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYSIS OF BASE STOCKAGE POLICIES

Personal Author(s):

GEISLER,M A

Report Date:

17 Feb 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086709

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NARRATIVE DESCRIPTION OF AN ANALYTIC THE-AFTER AIR-GROUND WARFARE SYSTEM

Personal Author(s):

BROM, J R

Report Date:

10 Feb 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086718

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RAND CODE FOR THE SIMPLEX METHOD (SX4) (FOR THE IBM 701 ELECTRONIC COMPUTER)

Personal Author(s):

ORCHARD-HAYS,WILLIAM

Report Date:

07 Feb 1955

Media Count:

1 Page(s)

Report Classification:

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Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086713

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMILARITY SOLUTION FOR A SPHERICAL SHOCK WAVE

Personal Author(s):

LATTER,RICHARD

Report Date:

03 Feb 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090508

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF COAL AND PEAT IN THE SOVIET UNION, 1928-1950

Personal Author(s):

TURGEON,LYNN

BERGSON,ABRAM

Report Date:

02 Feb 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0293670

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View Full Text (pdf)

File: /UL/293670.pdf

Size: 5 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A STUDY OF THE STRUCTURE OF THE IONOSPHERE

Personal Author(s):

KALLMANN, H K

Report Date:

Feb 1955

Media Count:

171 Page(s)

Report Number(s):

P-638

XD-XD

Monitor Series:

XD

Report Classification:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086707

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF FUELWOOD AND WOOD PRODUCTS IN THE U.S.S.R. 1928-1950

Personal Author(s):

Bernaut,Roman

Report Date:

01 Feb 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086708

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FEASIBILITY OF DEFENDING A SUBSONIC BOMBER WITH A FIXED-GUN TAIL DEFENSE SYSTEM

Personal Author(s):

JENKINS,J L

Report Date:

Feb 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0096722

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF QUALITY ROLLED STEEL IN THE SOVIET UNION 1928-1950

Personal Author(s):

BERGSON,ABRAM

TURGEON,LYNN

Report Date:

01 Feb 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085487

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DISTRIBUTION OF INDIRECT COSTS: A METHOD OF ALLOCATING THE COST OF AIR FORCE
INTERDEPENDENT SUPPORT ACTIVITIES TO MISSION ACTIVITIES

Personal Author(s):

FISHER,C H

Report Date:

26 Jan 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086489

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RECENT MILITARY THOUGHT IN SWEDEN ON WESTERN DEFENSE

Report Date:

25 Jan 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086704

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PROPOSAL FOR A NEW AIR FORCE SUPPLY PROCEDURE

Personal Author(s):

MCNEILL,RUSSELL B

BERMAN,E B

Report Date:

24 Jan 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086488

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME GERMAN MATERIALS ON SOVIET VULNERABILITIES

Personal Author(s):

WILLENZ, ERIC

Report Date:

21 Jan 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086960

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INCREASING THE SORTIE POTENTIAL OF FLY-AWAY KITS

Personal Author(s):

KARR,H W

Report Date:

18 Jan 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086702

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PREDICTION OF DEMAND FOR AIRCRAFT SPARE PARTS USING THE METHOD OF CONDITIONAL PROBABILITIES

Personal Author(s):

YOUNGS,J W T

GEISLER,M A

BROWN,B B

Report Date:

17 Jan 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086701

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECT OF CORRELATIONS ON THE EQUATION OF STATE OF AN ELECTRON GAS

Personal Author(s):

FERRELL,RICHARD

Report Date:

14 Jan 1955

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086490

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) ON MAXIMIZING AN INNER PRODUCT
Personal Author(s):
FLEMING,W H
Report Date:
11 Jan 1955
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0090506
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) NOTES ON LINEAR PROGRAMMING - PART XXIII. A PRODUCTION SMOOTHING PROBLEM
Personal Author(s):
JOHNSON,SELMER
DANTZIG,GEORGE
Report Date:
06 Jan 1955
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0086705
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON THE MIN CUT MAX FLOW THEOREM OF NETWORKS
Personal Author(s):
DANTZIG,G B
FULKERSON,D R
Report Date:
01 Jan 1955
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0339962
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) A PRELIMINARY DISCUSSION OF INTERCONTINENTAL BALLISTIC MISSILE DEFENSE
Descriptive Note:
Research memo.
Personal Author(s):
Graham, W B
Report Date:
01 Jan 1955
Media Count:
402 Page(s)
Report Number(s):
RAND-RM-1388
XC-USAF

Monitor Series:

USAF

Report Classification:

SECRET

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087886

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A GENERAL REPRESENTATION OF THE SUBSONIC LIFT-DRAG RELATION FOR AN ARBITRARY AIRPLANE CONFIGURATION

Personal Author(s):

BLAKESLEE, D J

JOHNSON, R P

SKAVDAHL, H

Report Date:

Jan 1955

Media Count:

1 Page(s)

Report Classification:

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Distribution Statement:

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Citation Format: FOIA(UL)

Accession Number:

AD0338889

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) VULNERABILITY OF THE INTERCONTINENTAL BALLISTIC MISSILE TO ATOMIC WEAPONS - ORDER OF
MAGNITUDE CONSIDERATIONS

Descriptive Note:

Research memo.

Personal Author(s):

Latter, Albert L

Latter, Richard

Report Date:

01 Jan 1955

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21 Page(s)

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RAND/RM-1424

XC-AFRDC

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Report Classification:

SECRET

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51 - RESTRICTED DATA

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086487

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE TERMINAL VULNERABILITY OF AIRCRAFT TO NON-NUCLEAR ROUNDS A QUALITATIVE REVIEW OF CURRENT KNOWLEDGE

Personal Author(s):

KENT,A I

PARRIOTT,W E

Report Date:

Jan 1955

Media Count:

199 Page(s)

Report Number(s):

RM-1405

Contract Number:

AF33(038)-6413

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086486

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SUMMARY OF SOME BASE SUPPLY ACTIVITY AND WORKLOAD REPORTS

Personal Author(s):

PETERSEN,J W

GEISLER,M A

Report Date:

29 Dec 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

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Citation Format: FOIA(UL)

Accession Number:

AD0224372

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

28 Dec 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086953

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NON-RECALL OF MATERIAL PRESENTED DURING SLEEP

Personal Author(s):

EMMONS,WILLIAM H

SIMON,CHARLES W

Report Date:

27 Dec 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086952

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RESPONSES TO MATERIAL PRESENTED DURING VARIOUS LEVELS OF SLEEP

Personal Author(s):

SIMON,CHARLES W

EMMONS,WILLIAM H

Report Date:

27 Dec 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0354476

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE DISRUPTION MISSION AND LARGE YIELD WEAPONS

Personal Author(s):

Capron, W M
Hanunian, N A

Report Date:
23 Dec 1954

Media Count:
42 Page(s)

Report Number(s):
RM-1174

Report Classification:
SECRET

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0096721

Corporate Author:
RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) PRICES OF BASIC CHEMICAL PRODUCTS IN THE SOVIET UNION, 1928-1950

Personal Author(s):
BERGSON,ABRAM
BERNAUT,ROMAN

Report Date:
17 Dec 1954

Media Count:
1 Page(s)

Report Classification:
Unclassified

Distribution Limitation(s):
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Citation Format: FOIA(UL)

Accession Number:

AD0096723

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF ORDINARY ROLLED STEEL IN THE SOVIET UNION, 1928-1950

Personal Author(s):

BERGSON, ABRAM

TURGEON, LYNN

Report Date:

10 Dec 1954

Media Count:

1 Page(s)

Report Classification:

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Citation Format: FOIA(UL)

Accession Number:

AD0086483

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) STATISTICAL THEORY OF NAVIGATION EMPLOYING INDEPENDENT INERTIAL AND VELOCITY MEASUREMENTS. I. FURTHER DISCUSSION OF THE ACCELEROMETER DIAL. II. OPTIMUM COMPUTATION OF VELOCITY

Personal Author(s):

SWERLING, P

REICH, E

Report Date:

09 Dec 1954

Media Count:

1 Page(s)

Report Classification:

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086482

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COST OF VARIOUS BASE STOCKING AND REQUISITIONING POLICIES FOR AIRCRAFT SPARE PARTS

Personal Author(s):

PETERSEN,J W

GEISLER,M A

Report Date:

08 Dec 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086703

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A TWO MACHINE GUN DUEL WITH THE BOMBER TURRET VULNERABLE

Personal Author(s):

BALLANTYNE, F P

Report Date:

07 Dec 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

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Citation Format: FOIA(UL)

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AD0096718

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF PAINTS IN THE SOVIET UNION, 1928-1950

Personal Author(s):

BERGSON,ABRAM

BERNAUT,ROMAN

Report Date:

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Media Count:

1 Page(s)

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Citation Format: FOIA(UL)

Accession Number:

AD0114162

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A REVIEW OF METHODS FOR LONG-RANGE INDIRECT BOMB DAMAGE ASSESSMENT

Personal Author(s):

SEPMEYER, L W

Report Date:

Dec 1954

Media Count:

1 Page(s)

Contract Number:

AF 33-038-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114161

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A POTENTIAL INTERCEPTOR FOR DEFENSE AGAINST THE INTERCONTINENTAL BALLISTIC MISSILE -
THE ONE-EYED GOALIE

Personal Author(s):

BLUMENTHAL, I S

Report Date:

Dec 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114160

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAFF OFFICERS' FIELD MANUAL

Personal Author(s):

STROTHER,K C

Report Date:

Dec 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090494

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE FIXED CHARGE PROBLEM

Personal Author(s):

HIRSCH,WARREN M

DANTZIG,GEORGE B

Report Date:

01 Dec 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086390

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYSIS OF A TYPICAL CHAIN TYPE AIRCRAFT ARRESTING GEAR

Personal Author(s):

SCHAMBERG,R

STURDEVANT,C V

Report Date:

Dec 1954

Media Count:

1 Page(s)

Report Classification:

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Citation Format: FOIA(UL)

Accession Number:

AD0096719

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF BRICKS IN THE SOVIET UNION, 1928-1950

Personal Author(s):

BERNAUT,ROMAN

BERGSON,ABRAM

Report Date:

01 Dec 1954

Media Count:

1 Page(s)

Report Classification:

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Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086394

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME GERMAN PRESS VIEWS ON THE DEFENSE OF EUROPE: A SURVEY OF WEST GERMAN PRESS
OPINION ON MILITARY ASPECTS OF THE DEFENSE OF EUROPE

Personal Author(s):

SCHNITZER,E W

Report Date:

26 Nov 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086395

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SUMMARY OF RECENT THOUGHT IN SWEDEN ON WESTERN DEFENSE BY JAMES J. ROBBINS

Personal Author(s):

SCHNITZER,E W

Report Date:

26 Nov 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090510

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE STRENGTH OF ANCHOR BOLTS SET IN CONCRETE

Personal Author(s):

SANDOVAL,CHARLES A

Report Date:

24 Nov 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086400

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GAME OF AIMING AND EVASION: GENERAL DISCUSSION AND THE MARKSMAN'S STRATEGIES

Personal Author(s):

ISAACS,RUFUS

Report Date:

24 Nov 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086399

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SIMPLE GAMES: AN OUTLINE OF THE DESCRIPTIVE THEORY

Personal Author(s):

SHAPLEY,L S

Report Date:

23 Nov 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340553

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RCA - PROJECT RAND PROGRESS REPORT (PROJECT FEED BACK)

Descriptive Note:

Progress rept. no. 10, 1 July-31 Aug 54.

Report Date:

23 Nov 1954

Media Count:

13 Page(s)

Report Number(s):

RM-1382

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

14 - DOD ONLY; NON-DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224371

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

19 Nov 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090541

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MAXIMAL FLOW THROUGH A NETWORK

Personal Author(s):

FORD,L R

FULKERSON,D R

Report Date:

19 Nov 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144274

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE INFLUENCE OF A VARIABLE ATMOSPHERE ON THE BLAST FROM HIGH BURST

Personal Author(s):

BRODE, H L

Report Date:

17 Nov 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090495

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LINEAR PROGRAMMING UNDER UNCERTAINTY

Personal Author(s):

DANTZIG,GEORGE B

Report Date:

16 Nov 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337760

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A STUDY OF COMPLEX TARGETS MOSCOW, DAYTON, AND GENEVA STEEL

Personal Author(s):

Helmer,Olaf

Dalkey,Norman

Thompson,Frederick B

Report Date:

15 Nov 1954

Media Count:

1 Page(s)

Report Number(s):

R272

Contract Number:

AF33 038 6413

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

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Notice: Only government agencies may request from DDC. Others to Cdr., AF Systems Command, Attn: DLXP. Andrews AFB, Washington, DC 20334.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090505

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FUNCTIONAL EQUATIONS, WIENER INTEGRALS AND APPLICATIONS. I. FUNCTIONAL EQUATIONS

Personal Author(s):

BELLMAN,RICHARD

Report Date:

10 Nov 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086393

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE CONVERGENCE OF DISCRETE STOCHASTIC DECISION PROCESSES TO THEIR CONTINUOUS ANALOGUES

Personal Author(s):

OSBORN, HOWARD

Report Date:

08 Nov 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086706

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOLUTIONS OF THE TEMPERATURE-PERTURBED THOMAS-FERMI EQUATION

Personal Author(s):

GILVARRY,J J

PEEBLES,G H

Report Date:

05 Nov 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354293

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRESERVATION OF TACTICAL AIR COMBAT POTENTIAL IN WESTERN EUROPE - PHYSICAL
VULNERABILITY OF AIR BASES TO A-WEAPON ATTACK

Personal Author(s):

Frick, R H

Report Date:

05 Nov 1954

Media Count:

78 Page(s)

Report Number(s):

RM1313

Contract Number:

AF49

638 700

Report Classification:

Unclassified

Distribution Limitation(s):

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23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified requesters shall obtain release approval from Development Planning, Hq. USAF, Wash. 25, D. C. Attn:AFRDP. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354120

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROJECT FEED BACK, PERTURBING INFLUENCES ON ATTITUDE

Personal Author(s):

Mullins,W D ,Jr

Tatistcheff,D

Report Date:

01 Nov 1954

Media Count:

8 Page(s)

Report Number(s):

RM1376

Pt. 2

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0085415
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) LOW-ALTITUDE STRATEGIC BOMBER CAPABILITIES
Report Date:
Nov 1954
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0090416
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) APPROXIMATIONS FOR DIGITAL COMPUTERS
Personal Author(s):
HASTINGS, CECIL JR
HAYWARD, JEANNE T
WONG, JAMES P JR
Report Date:
Nov 1954
Media Count:
1 Page(s)
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
Distribution Limitation(s):
03 - U.S. GOVT. ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0081065

Corporate Author:

RAND CORP SANTA MONICA CA

Descriptive Note:

Research memo.

Personal Author(s):

HULT, J L

Report Date:

25 Oct 1954

Media Count:

109 Page(s)

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RAND/RM-1353

XC-USAF

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AF 33(038)-6413

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USAF

Report Classification:

CONFIDENTIAL

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09 - CLASSIFIED

Distribution Statement:

Controlling Organization: Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086711

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ATOMIC ENERGY LEVELS FOR THE THOMAS-FERMI AND THOMAS-FERMI-DIRAC POTENTIAL

Personal Author(s):

LATTER,RICHARD

Report Date:

19 Oct 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086485

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE PROBABILITY DISTRIBUTION OF THE NUMBER OF SURVIVING VOMBERS FOR THE CASE OF
MULTI-PASS ATTACKERS

Personal Author(s):

WEGNER, L H

Report Date:

18 Oct 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085988

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EFFECTS OF REVERSED THRUST ON LANDING DISTANCE

Personal Author(s):

KELBER,C C

Report Date:

15 Oct 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0096720

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF CEMENT IN THE SOVIET UNION, 1928-1950

Personal Author(s):

BERNAUT,ROMAN

BERGSON,ABRAM

Report Date:

12 Oct 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085989

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File: /UL/085989.pdf

Size: 578 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OPTIMAL TACTICS IN A MULTISTRIKE AIR CAMPAIGN

Descriptive Note:

Research memo.

Personal Author(s):

Dresher, Melvin

Report Date:

07 Oct 1954

Media Count:

21 Page(s)

Report Number(s):

RAND-RM-1335

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; OCT 1954. Other requests shall be referred to Department of the Air Force, Attn: USAF Rand Project Office, Washington, DC 20330.

Citation Format: FOIA(UL)

Accession Number:

AD0111054

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) UPPER BOUNDS, SECONDARY CONSTRAINTS, AND BLOCK TRIANGULARITY IN LINEAR PROGRAMMING

Personal Author(s):

DANTZIG,GEORGE B

Report Date:

04 Oct 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114156

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Diplomatic Aspects of Soviet Air-Defense Policy, 1950-1953,

Personal Author(s):

George, Alexander L

Report Date:

Oct 1954

Media Count:

1 Page(s)

Report Number(s):

RM-1347

Contract Number:

AF33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

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Distribution Statement:

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Other requests shall be referred to RAND Corporation, 1700 Main St., Santa Monica CA 90407.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111384

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INDEX OF MISSILES DIVISION REPORTS, RESEARCH MEMORANDA, AND PAPERS

Report Date:

Oct 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144266

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MODEL FOR FALLOUT CALCULATIONS

Personal Author(s):

DISHINGTON,R H

Report Date:

Oct 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114157

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INTELLIGENCE VALUE OF SOVIET NOTES ON AIR INCIDENTS, 1950-1953

Personal Author(s):

GEORGE,ALEXANDER L

Report Date:

Oct 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086391

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE DESIRABILITY OF REVISING AIRCRAFT FORM 1
Personal Author(s):
LAVALLEE,R S
Report Date:
01 Oct 1954
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0354297
Full Text (pdf) Availability:
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File: /UL/354297.pdf
Size: 2 MB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) PROJECT FEED BACK
Report Date:
01 Oct 1954
Media Count:
76 Page(s)
Report Number(s):
RM-1376
PT. 1
XC-USAF
Contract Number:
AF 49(638)-700
Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114159

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DATA PROCESSING FOR TAC IN THE EUROPEAN THEATER, 1955-1958

Personal Author(s):

BARLOW,E J

MALLET,J D

Report Date:

Oct 1954

Media Count:

1 Page(s)

Contract Number:

AF 33-038-6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085412

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CURRENT STATUS (OCTOBER 1954) OF BRITISH INFRARED CELL AND IMAGE TUBE DEVELOPMENTS

Personal Author(s):

BALLARD,STANLEY S

Report Date:

Oct 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085417

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

Oct 1954

Media Count:

11 Page(s)

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RM-799-3

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Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086484

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) REVISED FUSELAGE WEIGHT EQUATION

Personal Author(s):

WECHSLER, J W

Report Date:

Oct 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0081323

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

KIRKWOOD,R L

Report Date:

Oct 1954

Media Count:

90 Page(s)

Report Number(s):

RM-1365

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086030

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/086030.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) COMPUTATION OF RADIATION LEVEL IN THE VICINITY OF A DISTRIBUTION OF CONTAMINATING MATERIAL

Descriptive Note:

Research memo.

Personal Author(s):

FRICK, R H

Report Date:

30 Sep 1954

Media Count:

31 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086028

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONFIDENCE INTERVALS FOR POISSON PARAMETERS IN LOGISTICS RESEARCH

Personal Author(s):

YOUNGS,J W T

GEISLER,M A

MIRKOVICH,A R

Report Date:

30 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086029

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELASTIC STRESS WAVES PRODUCED BY PRESSURE LOADS ON SPHERICAL SHELL

Personal Author(s):

HUTH,J H

COLE,J D

Report Date:

30 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354467

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A STUDY OF INTERIM NUCLEAR WARHEAD ROCKETS AS INTERCEPTOR ARMAMENT,

Personal Author(s):

Ballantyne,F P

Sargeant,M J

Report Date:

28 Sep 1954

Media Count:

49 Page(s)

Report Number(s):

RM-1354

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

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Citation Format: FOIA(UL)

Accession Number:

AD0114142

Full Text (pdf) Availability:

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File: /UL/114142.pdf

Size: 597 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EFFECTS OF ENVIRONMENT IN REDUCING DOSE RATES PRODUCED BY RADIOACTIVE FALLOUT FROM
NUCLEAR EXPLOSIONS

Descriptive Note:

Research memo.

Personal Author(s):

HILL, J E

Report Date:

28 Sep 1954

Media Count:

13 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational use; 28
Sep 1954. Other requests shall be referred to Department of the Air Force, Washington DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354465

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Considerations of Radar Performance, Attack Direction, and Weapon Yield Pertinent to the Selection of an Air-to-Air Atomic Rocket.

Personal Author(s):

Emerson,D E

Report Date:

28 Sep 1954

Media Count:

46 Page(s)

Report Number(s):

RM-1356

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

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Citation Format: FOIA(UL)

Accession Number:

AD0354466

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROJECT FEED BACK.

Descriptive Note:

Final rept. 16 Jun 52-15 Dec 53.

Report Date:

28 Sep 1954

Media Count:

57 Page(s)

Report Number(s):

RM-1350

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0086027

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON THE EFFECT OF CIRCULATION IN HEAT TRANSFER

Personal Author(s):

COLE, J D

Report Date:

24 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354290

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE AIR BLAST AT HIGH ALTITUDE

Personal Author(s):

Magee,J

Meyerott,R

Gilmore,F R

Latter,A

Report Date:

22 Sep 1954

Media Count:

35 Page(s)

Report Number(s):

RM1345

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111053

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUATION OF STATE OF AIR ON THE STATISTICAL MODEL

Personal Author(s):

LATTER,RICHARD

Report Date:

21 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086397

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMIZATION IN DYNAMIC ALLOCATION PROBLEMS BY A MODIFIED CALCULUS OF VARIATIONS
TECHNIQUE

Personal Author(s):

MENGEL,A S

Report Date:

20 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339198

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROJECT RAND. STAFF REPORT

Report Date:

15 Sep 1954

Media Count:

60 Page(s)

Report Number(s):

R270

Contract Number:

AF33 038 6413

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086025

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROPOSAL FOR THE DEVELOPMENT OF A THEORY OF ECONOMIC GROWTH FOR A SOVIET-TYPE ECONOMY

Personal Author(s):

LEIBENSTEIN,HARVEY

Report Date:

15 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354294

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRESERVATIONS OF TACTICAL AIR COMBAT POTENTIAL IN WESTERN EUROPE. GUIDED MISSILE
DEFENSE POTENTIAL

Personal Author(s):

Tuck, R E

Report Date:

15 Sep 1954

Media Count:

207 Page(s)

Report Number(s):

RM1312

Contract Number:

AF49

638 700

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Notice: Release only to U. S. Government Agencies is authorized. Other certified requesters shall obtain release approval from Development Planning, AFRDP, Hq., U. S. Air Force, Wash. 25, DC. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085413

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CAPABILITIES AND OPERATING COSTS OF POSSIBLE FUTURE TRANSPORT AIRPLANES TURBOFAN
ENGINE SUPPLEMENT

Report Date:

15 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114133

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRESERVATION OF TACTICAL AIR COMBAT POTENTIAL IN WESTERN EUROPE. UNDERGROUND
HANGARS FOR FIGHTER-BOMBER OPERATIONS

Personal Author(s):

STOCKTON,A C

Report Date:

14 Sep 1954

Media Count:

50 Page(s)

Report Number(s):

RM-1230

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0086023
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) ANALYSES OF B-47 AOCF EXPERIENCE
Personal Author(s):
KARR, H W
Report Date:
14 Sep 1954
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0086024
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON THE SOLUTION OF AN APPROXIMATE EQUATION IN THE THEORY OF OPTIMAL ALLOCATION
Personal Author(s):
ANDERSON,D R
Report Date:
14 Sep 1954
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086022

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANALYTIC FORMULATION OF A THEATER AIR-GROUND WARFARE SYSTEM (1953 TECHNIQUES)

Personal Author(s):

SISKA, C P

GIAMBONI, L A

LIND, J R

Report Date:

13 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086021

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON MULTI-STAGE GAMES WITH IMPRECISE PAY-OFF

Personal Author(s):

BELLMAN,RICHARD

Report Date:

09 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085987

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPARISON OF DEMAND FOR SPARE AIRCRAFT ITEMS BY B-50D AIRCRAFT (PROJECT RED HEAD))
AND B-47 AIRCRAFT DEPLOYED TO ENGLISH BASES

Personal Author(s):

BROWN,B B

GEISLER,M A

Report Date:

08 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341107

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AIR DEFENSE STUDY: COST METHODOLOGY - RADAR NETWORK, AIRCRAFT AND MISSILE SYSTEMS

Report Date:

02 Sep 1954

Media Count:

63 Page(s)

Report Number(s):

RM1170

Report Classification:

SECRET

Distribution Limitation(s):

13 - U.S. GOVT. ONLY; NON-DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only government agencies may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0107409

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON THE PROBLEMS OF UTILIZING ATOMIC ENERGY PART II. SOURCES OF NUCLEAR FUEL

Personal Author(s):

KRIEGER,F J

Report Date:

02 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111173

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME FACTORS AFFECTING THE PERFORMANCE OF A TRACKING RADAR

Personal Author(s):

SWERLING,P

Report Date:

Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0340554

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) APPLICATION OF BAKER OPTICAL SCANNING TO THE IMAGE ORTHICON (PROJECT FEED BACK)

Personal Author(s):

Thompson, J S

Report Date:

Sep 1954

Media Count:

14 Page(s)

Report Number(s):

RM-1381

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

14 - DOD ONLY; NON-DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085986

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CHANGING JAPANESE ATTITUDES TOWARD ATOMIC WEAPONS

Personal Author(s):

HALPERN,A M

Report Date:

01 Sep 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114152

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRESERVATION OF TACTICAL AIR COMBAT POTENTIAL IN WESTERN EUROPE. FIGHTER DEFENSE
POTENTIAL

Personal Author(s):

ELLIS,J W JR

Report Date:

Sep 1954

Media Count:

1 Page(s)

Report Number(s):

RM-1311

Contract Number:

AF33(038)-6413

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311489

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRESERVATION OF TACTICAL AIR COMBAT POTENTIAL IN WESTERN EUROPE- VULNERABILITY AND
DEFENSE OF THE THEATRE LOGISTICS SUPPORT SYSTEM,

Personal Author(s):

Baldwin, W W

Report Date:

01 Sep 1954

Media Count:

119 Page(s)

Report Number(s):

RM-1314

Contract Number:

AF

49(638)-700

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: USGO: others to Director AFRDC, USAF, Washington, D. C.. Release or announcement to foreign governments or their nationals is not authorized. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0107410

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RED STAR SERIES ON THE PROBLEMS OF UTILIZING ATOMIC ENERGY. PART I. ON THE WAY TO CONTROLLED NUCLEAR REACTIONS

Personal Author(s):

KRIEGER,F J

Report Date:

31 Aug 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086392

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PARALLEL CONTROL

Personal Author(s):

NASH,JOHN

Report Date:

27 Aug 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086026

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A LINEAR PROGRAMMING SOLUTION TO DYNAMIC LEONTIEF TYPE MODELS

Personal Author(s):

WAGNER,HARVEY M

Report Date:

27 Aug 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085985

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/085985.pdf

Size: 445 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CONTINUOUS ITERATION METHOD FOR SOLUTION OF DIFFERENTIAL GAMES

Descriptive Note:

Research memo.

Personal Author(s):

NASH, JOHN

Report Date:

18 Aug 1954

Media Count:

12 Page(s)

Report Number(s):

RAND-RM-1326

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Operational and Administrative Use; 18 Aug 1954. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC, 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085984

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COMPRESSIBILITY OF ORGANIZATIONS AND ECONOMIC SYSTEMS

Personal Author(s):

MORGENSTEN,OSKAR

Report Date:

17 Aug 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354469

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CHARACTERISTICS OF POSSIBLE SOVIET STRATEGIC CARRIERS, 1954-57

Personal Author(s):

DeHaven,James C

Report Date:

16 Aug 1954

Media Count:

75 Page(s)

Report Number(s):

RM-1304

Contract Number:

AF 49(638)-700

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution: USGO: others to Directorate of Development Planning, attn: AFRDP, United States Air Force, Washington, D. C.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0105318

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BALLISTIC MISSILE RE-ENTRY LOADS FOR A PARACHUTE STABILIZED CONFIGURATION

Personal Author(s):

FRICK,R H

Report Date:

13 Aug 1954

Media Count:

19 Page(s)

Report Number(s):

RM-1323

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086840

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE MINIMIZATION OF THE INTEGRAL FROM ZERO TO T OF THE ABSOLUTE VALUE OF 1 MINUS X(T) DT

Personal Author(s):

BELLMAN,RICHARD

GLICKSBERG,IRVING

GROSS,OLIVER

Report Date:
12 Aug 1954
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0085981
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) GAMES WITH INFORMATION LAG
Personal Author(s):
SCARF,H
SHAPLEY,L S
Report Date:
10 Aug 1954
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0085490
Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON THE ANALYSIS OF "IMMERSED" VARIANCE

Personal Author(s):

TUKEY,JOHN W

Report Date:

09 Aug 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085489

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GAME OF AIMING AND EVASION

Personal Author(s):

ISAACS,RUFUS

KARLIN,SAMUEL

Report Date:

06 Aug 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085488

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PREDICTABILITY OF DEMAND FOR B-47 AIRFRAME SPARE ITEMS

Personal Author(s):

GEISLER,M A

YOUNGS,J W T

Report Date:

04 Aug 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116579

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRESERVATION OF TACTICAL AIR COMBAT POTENTIAL IN WESTERN EUROPE. WING LEVEL DEFENSE AGAINST A-BOMBING

Personal Author(s):

BALDWIN, W W

DAVIS, D J

Report Date:

Aug 1954

Media Count:

1 Page(s)

Report Number(s):

RM-1462

Contract Number:
AF33(038)-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0114153
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE GUIDANCE OF LONGRANGE BALLISTIC MISSILES BY ACCELEROMETER SYSTEMS
Personal Author(s):
FRYE, W E
Report Date:
Aug 1954
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0114151
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ESTIMATED COSTS OF POSSIBLE SOVIET INTER-CONTINENTAL WEAPON SYSTEMS

Report Date:
Aug 1954
Media Count:
1 Page(s)
Contract Number:
AF 33-038-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0114149
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) OPERATIONS AND TACTICS OF SOVIET STRATEGIC BOMBARDMENT SYSTEMS AGAINST THE U.S.
1954-1957
Personal Author(s):
RAYMOND,R C
Report Date:
Aug 1954
Media Count:
1 Page(s)
Report Number(s):
RM-1305
Contract Number:
AF33(038)-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114150

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CAMPAIGN PERFORMANCE OF SOVIET INTERCONTINENTAL WEAPON SYSTEMS, 1954-1957

Personal Author(s):

HEYMANN,HANS JR

DADANT,P M

DUDLEY,V S

Report Date:

Aug 1954

Media Count:

1 Page(s)

Contract Number:

AF 33-038-6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114144

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRESERVATION OF TACTICAL AIR COMBAT POTENTIAL IN WESTERN EUROPE - THE SORTIE
POTENTIAL OF AN UNDAMAGED WING

Personal Author(s):

BALDWIN, W W

DAVIS, D J

Report Date:

Aug 1954

Media Count:

1 Page(s)

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: DoD only: Others to Headquarters, USAF/RDQA, RAND/ANSER Office, Washington, D. C. 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114146

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STRATEGIC CONTEXT, OBJECTIVES, AND ENVIRONMENT FOR THE SOVIET INTERCONTINENTAL MISSION, 1954-57

Personal Author(s):

HEYMANN,HANS JR

Report Date:

Aug 1954

Media Count:

1 Page(s)

Contract Number:

AF 33-038-6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0114147
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE SOVIET STRATEGIC BASE PROBLEM
Personal Author(s):
DEHAVEN,JAMES C
Report Date:
Aug 1954
Media Count:
1 Page(s)
Contract Number:
AF 33-038-6413
Report Classification:
Unclassified
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0114148
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) FEASIBILITY AND COST OF MINIMAL SOVIET ARCTIC REFUELING BASES
Personal Author(s):
O'SULLIVAN,J J
HAVEN,E J
Report Date:
Aug 1954
Media Count:
1 Page(s)
Contract Number:
AF 33-038-6413
Report Classification:
CONFIDENTIAL

Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0114197
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE SOVIET INTERCONTINENTAL MISSION THROUGH 1957
Personal Author(s):
HEYMANN,HANS JR
DEHAVEN,JAMES C
RAYMOND,RICHARD C
Report Date:
Aug 1954
Media Count:
1 Page(s)
Contract Number:
AF 33(038)-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0085983
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOME VULNERABLE AREAS OF THE B-47 AND B-52

Personal Author(s):

KENT,A I

Report Date:

Aug 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354470

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRESERVATION OF TACTICAL AIR COMBAT POTENTIAL IN WESTERN EUROPE-DEFENSE OF A WING
AGAINST ATOMIC ATTACK,

Personal Author(s):

Baldwin,W W

Davis,D J

Report Date:

01 Aug 1954

Media Count:

161 Page(s)

Report Number(s):

RM-1293

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

Distribution Statement:

Distribution: USGO: Others to Headquarters, USAF/RDQA, RAND/ANSER Office, Washington, D. C.
20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086839

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMAL PURE STRATEGIES IN A TACTICAL AIR GAME

Personal Author(s):

DRESHER,MELVIN

Report Date:

Aug 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0080305

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) HEAT TRANSFER ASPECTS OF THE ATMOSPHERIC RE-ENTRY OF LONG-RANGE BALLISTIC MISSILES

Personal Author(s):

GAZLEY, CARL JR

Report Date:

01 Aug 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085485

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYSIS OF THE DEMAND PATTERNS FOR B-47 AIRFRAME PARTS AT AIR BASE LEVEL

Personal Author(s):

BROWN,B B

GEISLER,M A

Report Date:

27 Jul 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341082

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MISSILE SYSTEMS FOR STRATEGIC BOMBARDMENT

Personal Author(s):

Clement,G H

Bahrman,C P

Report Date:

15 Jul 1954

Media Count:

67 Page(s)

Report Number(s):

R268

Contract Number:

AF33 038 6413

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114145

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRESERVATION OF TACTICAL AIR COMBAT POTENTIAL IN WESTERN EUROPE. A PREFERRED PLAN OF OPERATIONS FOR B-61 A (MATADOR) SQUADRONS

Personal Author(s):

STEWART,R L

Report Date:

15 Jul 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090502

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF SOVIET AND UNITED STATES RETAIL FOOD PRICES FOR 1950

Personal Author(s):

WAINSTEIN,E S

Report Date:

13 Jul 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114139

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE DUAL SIMPLEX ALGORITHM

Personal Author(s):

DANTZIG,GEORGE B

Report Date:

03 Jul 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0086920
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) ANALYSIS OF B-47 CONSUMPTION DATA AND ACTIVITY
Personal Author(s):
GEISLER, M A
BROWN, B B
HIXON, O M
Report Date:
02 Jul 1954
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0090491
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) DYNAMIC PROGRAMMING OF CONTINUOUS PROCESSES
Personal Author(s):
BELLMAN,RICHARD

Report Date:

Jul 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0109960

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPUTATIONAL PROCEDURE FOR A SCHEDULING PROBLEM OF EDIE

Personal Author(s):

DANTZIG,GEORGE B

Report Date:

01 Jul 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085486

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFECTS OF IMPULSIVE DEFLECTIONS ON BALLISTIC MISSILE TRAJECTORIES

Personal Author(s):

BLUMENTHAL, I S

Report Date:

Jul 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354292

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYSIS OF GUST LOADING OF AIRCRAFT BY ATOMIC BOMBS

Personal Author(s):

Gore, L A

Elswick, W R

Report Date:

01 Jul 1954

Media Count:

89 Page(s)

Report Number(s):

RM1319

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086921

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ANALYSIS OF MARCH AIR FORCE BASE B-47 AIRFRAME CONSUMPTION DATA ON BASIS OF DOLLAR VALUE

Personal Author(s):

GEISLER, M A

KARR, H W

HIXON, O M

Report Date:

01 Jul 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114154

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME OBSERVATIONS ON SOVIET DISCLOSURE OF NEW AIRCRAFT

Personal Author(s):

GARTHOFF, RAYMOND L

Report Date:

Jul 1954

Media Count:

1 Page(s)

Contract Number:

AF 33-038-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339957

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) TRANSPORT AND EARLY DEPOSITION OF RADIOACTIVE DEBRIS FROM ATOMIC EXPLOSIONS

Personal Author(s):

Greenfield, Stanley M

Kellogg, William W

Kreiger, F J

Rapp, R R

Report Date:

01 Jul 1954

Media Count:

270 Page(s)

Report Number(s):

R-265-AEC

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 01 JUL 1954. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114143

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A BRIEF STUDY OF TANKER SUPPORT FOR B-52C

Personal Author(s):

RUMPH,L B

STURDEVANT,C V

WOHLSTETTER,A J

Report Date:

Jul 1954

Media Count:

1 Page(s)

Report Number(s):

RM-1291

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0222648

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) QUANTITATIVE ESTIMATE OF FREQUENCY AND MASS DISTRIBUTION OF DUST PARTICLES CAUSING
THE ZODIACAL LIGHT EFFECT

Personal Author(s):

KALLMANN,H K

Report Date:

28 Jun 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086919

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A DOLLAR INDEX OF SOVIET ELECTRIC POWER OUTPUT

Personal Author(s):

GERSCHENKRON,ALEXANDER

Report Date:

24 Jun 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0109331

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A FIELD TRIAL OF AN AIR FORCE ELECTRONIC EQUIPMENT RELIABILITY STUDY PROGRAM

Personal Author(s):

HADDEN,F A

SEPMEYER,L W

Report Date:

17 Jun 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090501

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OPTIMAL SOLUTION OF A DYNAMIC LEONTIEF MODEL WITH SUBSTITUTION

Personal Author(s):

DANTZIG,GEORGE B

Report Date:

15 Jun 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085482

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE GEOGRAPHIC DISTRIBUTION OF METAL WORKING EQUIPMENT

Personal Author(s):

MARKOWITZ, H M

Report Date:

10 Jun 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354472

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRESERVATION OF TACTICAL AIR COMBAT POTENTIAL IN WESTERN EUROPE - SORTIE POTENTIAL OF A WING UNDER ATOMIC ATTACK,

Personal Author(s):

Baldwin, W W

Davis, D J

Report Date:

01 Jun 1954

Media Count:

60 Page(s)

Report Number(s):

RM-1246

Report Classification:

SECRET

Distribution Limitation(s):

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51 - RESTRICTED DATA

Distribution Statement:

Distribution: USGO: Others to Headquarters, USAF/RDQA, RAND/ANSER Office, Washington, D. C. 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354471

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPARATIVE ANALYSIS OF VARIOUS POWER SUPPLIES FOR PROJECT FEEDBACK,

Personal Author(s):

Dickinson,B W O

Report Date:

01 Jun 1954

Media Count:

68 Page(s)

Report Number(s):

RM-1249

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Release only to U. S. Government agencies is authorized. Other certified re-requesters shall obtain release approval from Director of Development Planning, AFRDP, Hq., USAF, Washington, D. C. Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086918

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A PRELIMINARY PROBABILISTIC ANALYSIS OF THE AIRCRAFT FLYING CYCLE

Personal Author(s):

STROLLER, D S

Report Date:

01 Jun 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086832

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PERFORMANCE, WEIGHT, AND SIZE RELATIONS FOR A FAMILY OF TURBOFAN ENGINES WITH EXHAUST MIXING

Personal Author(s):

GIST, W B

KELBER, C C

Report Date:

Jun 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085414

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WEAPONS SYSTEMS FOR LOW-ALTITUDE STRATEGIC BOMBING

Personal Author(s):

RUMPH,L B

Report Date:

Jun 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116580

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRESERVATION OF TACTICAL AIR COMBAT POTENTIAL IN WESTERN EUROPE - WING SURVIVAL AFTER
ATOMIC ATTACK

Personal Author(s):

BALDWIN,W W

DAVIS,D J

Report Date:

Jun 1954

Media Count:

1 Page(s)

Report Number(s):

RM-1463

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090499

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF RAILROAD ROLLING STOCK, U.S.S.R.1927/8-1949

Personal Author(s):

MOORSTEEN,RICHARD

Report Date:

27 May 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085481

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ELECTRONIC RELIABILITY AND SUPPLY IMPROVEMENT BASED ON FAILURE REPORTING AND PRESENTATION

Personal Author(s):

HADDEN,F A

SEPMEYER,L W

Report Date:

25 May 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085430

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE NATURE AND APPLICATION OF PROCESS ANALYSIS

Personal Author(s):

MARKOWITZ,H M

Report Date:

24 May 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090500

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRODUCT-FORM TABLEAU FOR REVISED SIMPLEX METHOD. COMPUTING APPENDIX

Personal Author(s):

DANTZIG,GEORGE B

ORCHARD-HAYS,WILLIAM

WATERS,GEORGE

Report Date:

19 May 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085429

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE D.P.F.D. A DOUBLE PRECISION (18 DIGITS) FLOATING DECIMAL SETUP FOR IBM'S MODEL II CPC

Personal Author(s):

WONG,JAMES P JR

Report Date:

13 May 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090498

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STATISTICS OF SOVIET AGRICULTURE

Personal Author(s):

NIMITZ,NANCY

Report Date:

07 May 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: No Foreign.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0109959

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE LIMITING BEHAVIOR OF DISCRETE DYNAMIC PROGRAMMING PROCESSES. III. (THE GENERALIZED GOLD-MINING PROBLEM)

Personal Author(s):

BELLMAN,RICHARD

Report Date:

03 May 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086917

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RELIABILITY OF NIKE AND TERRIER

Personal Author(s):

HOWARD,W J

Report Date:

03 May 1954

Media Count:

19 Page(s)

Report Number(s):

RM-1247

Contract Number:

AF 33(038)6413

NORD-10706

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0081571

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) VULNERABILITY OF AIRCRAFT TO FRAGMENTS

Personal Author(s):

PARRIOTT, W E

Report Date:

May 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090542

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BACKGROUND, DEVELOPMENT, AND EXTENSIONS OF THE REVISED SIMPLEX METHOD

Personal Author(s):

ORCHARD-HAYS, WM

Report Date:

30 Apr 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086915

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/086915.pdf

Size: 838 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME VULNERABLE AREAS OF THE B-45A, F-84G, AND MIG-15

Personal Author(s):

PARRIOTT, W E

Report Date:

28 Apr 1954

Media Count:

21 Page(s)

Report Number(s):

RM-1245

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational use; 28 Apr 1954. Other requests shall be referred to Department of the Air Force, Washington DC.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090497

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF INDUSTRIAL ELECTRIC POWER IN THE SOVIET UNION, 1928-1950

Personal Author(s):

TURGEON,LYNN

Report Date:

27 Apr 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0089227

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE LIMITING BEHAVIOR OF DISCRETE CYNAMIC PROGRAMMING PROCESSES. II. (A DIRECT PROOF OF CONVERGENCE)

Personal Author(s):

BELLMAN,RICHARD

Report Date:

26 Apr 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114140

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPOSITE SIMPLEX-DUAL SIMPLEX ALGORITHM. I

Personal Author(s):

DANTZIG,GEORGE B

Report Date:

26 Apr 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086831

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INFLUENCE OF CERTAIN OFFENSE COUNTERMEASURES ON THE COMPARISON OF HIGH AND LOW
ALTITUDE CAPABILITIES OF STRATEGIC BOMBERS

Personal Author(s):

SCHAMBERG,R

Report Date:

23 Apr 1954

Media Count:

40 Page(s)

Report Number(s):

RM-1295

Contract Number:

AF 33(038)6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086914

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE LIMITING BEHAVIOR OF DISCRETE DYNAMIC PROGRAMMING PROCESSES. I (THE
GOLDMINING PROBLEM)

Personal Author(s):

BELLMAN,RICHARD

Report Date:

19 Apr 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB183180

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Applications of Monte Carlo.

Personal Author(s):

Kahn, Herman

Report Date:

19 Apr 1954

Media Count:

257 Page(s)

Report Number(s):

RM-1237-AEC

XF-XD

Contract Number:

AT(11-1)-135

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085425

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE METAMORPHOSIS OF THE STALIN MYTH

Personal Author(s):

TUCKER,ROBERT C

Report Date:

16 Apr 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116577

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUATION OF STATE ON THE THOMAS-FERMI MODEL. PART II. ZERO TEMPERATURE WITHOUT EXCHANGE

Personal Author(s):

LATTER,RICHARD

Report Date:

01 Apr 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114155

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE UNITED STATES GUIDED MISSILES PROGRAM. A STUDY OF UNCLASSIFIED INFORMATION

Personal Author(s):

DOLE,S H

Report Date:

Apr 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116578

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUATION OF STATE ON THE THOMAS-FERMI MODEL. PART III. ZERO TEMPERATURE WITH EXCHANGE

Personal Author(s):

LATTER,RICHARD

Report Date:

01 Apr 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086913

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/086913.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RESIDUAL GAMMA RADIATION HAZARD AFTER LIMITED DECONTAMINATION OPERATIONS

Descriptive Note:

Research memo.

Personal Author(s):

KRIEGER, F J

Report Date:

01 Apr 1954

Media Count:

21 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

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Apr 1954. Other requests shall be referred to the Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116576

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUATION OF STATE ON THE THOMAS-FERMI MODEL. PART I. NON-ZERO TEMPERATURE

Personal Author(s):

LATTER,RICHARD

Report Date:

01 Apr 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090420

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUATIONS OF STATE ON THE THOMAS-FERMI STATISTICAL MODEL

Personal Author(s):

LATTER,RICHARD

Report Date:

01 Apr 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090496

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRICES OF PRIME MOVERS, U.S.S.R. 1927/8-1949

Personal Author(s):

MOORSTEEN,RICHARD

Report Date:

30 Mar 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085424

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONSIDERATIONS FOR RESEARCH IN A SLEEP-LEARNING PROGRAM

Personal Author(s):

SIMON,CHARLES W

EMMONS,WILLIAM H

Report Date:

29 Mar 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086912

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE OPTIMAL SCHEDULING OF FIGHTER ENGAGEMENTS ON AN INBOUND BOMBER FORCE

Personal Author(s):

LAVIN, M M

WEGNER, L H

WILSON, J A

Report Date:

26 Mar 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086911

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A COMPARISON OF ESTIMATES OF THE NUMBER OF SURVIVING BOMBERS IN A PARTICULAR AIR
BATTLE MODEL

Personal Author(s):

WEGNER, L H

Report Date:

24 Mar 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114132

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GERMAN STUDIES. GERMAN GEOPOLITICS REVIVED: A SURVEY OF GEOPOLITICAL WRITING IN GERMANY TODAY

Personal Author(s):

SCHNITZER, E W

Report Date:

19 Mar 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085483

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE DERIVATIVES OF THE VALUE OF A GAME
Personal Author(s):
GROSS,OLIVER
Report Date:
10 Mar 1954
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0086836
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) APPROXIMATE METHODS FOR DETERMINING THE PERFORMANCE OF GAS TURBINE ENGINES AT
OFF-DESIGN CONDITIONS
Personal Author(s):
GIST,W B
WOODWORTH,L R
Report Date:
05 Mar 1954
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114131

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) APPROACHES TO SOVIET INTER-INDUSTRY RELATIONSHIPS

Personal Author(s):

KAPLAN,N

HOFFENBERG,M

Report Date:

02 Mar 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354296

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROJECT FEEDBACK - FLIGHT MECHANICS

Personal Author(s):

Lieske,H A

Report Date:

01 Mar 1954

Media Count:

63 Page(s)

Report Number(s):

RM1207

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311164

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROJECT FEED BACK - CONTROL CHARACTERISTICS OF SMALL NUCLEAR REACTORS,

Personal Author(s):

White,J R

Report Date:

01 Mar 1954

Media Count:

55 Page(s)

Report Number(s):

RM1214

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086838

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE RELATIVE EFFECTIVENESS OF THE 2'.75 FFAR, 1'.5 NAKA, 2'.0 GIMLET, AND 2'.0 T-214 AGAINST
HIGH ALTITUDE BOMBER TARGETS

Personal Author(s):

BALLANTYNE,F P

SARGEANT,M J

Report Date:

Mar 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144276

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE RISE OF AN ATOMIC CLOUD FROM A LOW YIELD DEVICE DETONATED IN THE STRATOSPHERE

Personal Author(s):

KELLOG, W W

Report Date:

Mar 1954

Media Count:

7 Page(s)

Report Number(s):

RM-1252

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

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52 - FORMERLY RESTRICTED DATA

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0366876

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROJECT FEED BACK STRUCTURES AND WEIGHTS.

Descriptive Note:

Research memo.,

Personal Author(s):

Culp,C R

Report Date:

01 Mar 1954

Media Count:

58 Page(s)

Report Number(s):

RM-1213

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085422

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE METAL WORKING INDUSTRIES AFTER ATOMIC ATTACK

Personal Author(s):

MARKOWITZ,H M

Report Date:

Mar 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0068786

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SURVEY OF THE MATHEMATICAL THEORY OF TIME-LAG, RETARDED CONTROL, AND HEREDITARY PROCESSES

Personal Author(s):

BELLMAN,RICHARD

DANSKIN,JOHN M JR

Report Date:

01 Mar 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0354291
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) PROJECT FEED BACK ASCENT ERROR CONSIDERATIONS
Personal Author(s):
White,J R
Report Date:
01 Mar 1954
Media Count:
1 Page(s)
Report Number(s):
RM1240
Contract Number:
AF49 638 700
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0085426
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) STATISTICAL TREATMENT OF BALLOON TRAJECTORIES TO DETERMINE COVERAGE
Personal Author(s):
KELLOGG,W W
Report Date:
Mar 1954
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0065881

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME PULSED DOPPLER MTI AND AMTI TECHNIQUES. A THEORETICAL ANALYSIS WITH SELECTED APPLICATIONS

Personal Author(s):

EMERSON,R C

Report Date:

Mar 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0873025

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Project RAND.

Descriptive Note:

Annual rept. no. 8.

Report Date:

01 Mar 1954

Media Count:

22 Page(s)

Report Number(s):

R-263

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085421

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLIFIED PHYSICAL INTERPRETATION OF WHITCOMB'S "AREA RULE" FOR THE REDUCTION OF SUPERSONIC PRESSURE DRAG

Personal Author(s):

SCHAMBERG,R

Report Date:

17 Feb 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0109958

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME CHARACTERISTICS OF MANUFACTURER' PARTS NUMBERS NOW INCLUDED IN AIR FORCE CATALOGS

Personal Author(s):

ENKE,STEPHEN

Report Date:

17 Feb 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354412

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROJECT FEED BACK

Descriptive Note:

Progress rept., 1 Oct-30 Nov 53.

Report Date:

11 Feb 1954

Media Count:

1 Page(s)

Report Number(s):

RM-1193

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224258

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A General Survey of the Theory of Dynamic Programming,

Report Date:

11 Feb 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0606331

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SECRET WEAPONS OF THE SOVIET UNION,

Personal Author(s):

Volursus,

Report Date:

Feb 1954

Media Count:

10 Page(s)

Report Number(s):

T-33

TT-64-71465

Monitor Series:

64-71465

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111500

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AIRCRAFT VULNERABLE AREA CATALOG

Personal Author(s):

PARRIOTT,W E

Report Date:

Feb 1954

Media Count:

1 Page(s)

Report Number(s):

RM-1189

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090418

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RITUAL OF LIQUIDATION. THE CASE OF THE MOSCOW TRIALS

Personal Author(s):

LEITES,NATHAN

BERNAUT,ELSA

Report Date:

Feb 1954

Media Count:

1 Page(s)

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0468580

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE SECRET WEAPONS OF THE SOVIET UNION,

Personal Author(s):

Schnitzer,E W

Report Date:

Feb 1954

Media Count:

8 Page(s)

Report Number(s):

T-33

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

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Citation Format: FOIA(UL)

Accession Number:

AD0081572

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WEIGHTS OF MISSILES AND MISSILE COMPONENTS CURRENTLY UNDER DESIGN AND TEST

Personal Author(s):

OELSCHLAGER, R T

Report Date:

Feb 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114158

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) REAC INVESTIGATION OF THE "BLINKER" COUNTERMEASURE AGAINST THE DOVE INFRARED GUIDED BOMB

Personal Author(s):

WHITE, J R

Report Date:

Feb 1954

Media Count:

1 Page(s)

Report Number(s):

RM-1364

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0116589

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFICIENCY AND ECONOMY IN GOVERNMENT THROUGH NEW BUDGETING AND ACCOUNTING
PROCEDURES

Personal Author(s):

NOVICK,DAVID

Report Date:

01 Feb 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

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Citation Format: FOIA(UL)

Accession Number:

AD0144273

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DESTRUCTION OF STRUCTURES BY BLAST WIND

Personal Author(s):

GORE,L A

O'SULLIVAN,J J

Report Date:

Feb 1954

Media Count:

35 Page(s)

Report Number(s):

RM-1236

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0224690

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Simple Models for a Strategic Bombing Campaign,

Report Date:

28 Jan 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0109957

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A THEORETICAL TREATMENT OF SPALLING

Personal Author(s):

HUTH,J H

COLE,J D

Report Date:

27 Jan 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086835

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROPOSAL FOR REDUCTION OF FACTORS OF SAFETY FOR MILITARY AIRPLANES

Personal Author(s):

SHANLEY, F R

Report Date:

15 Jan 1954

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

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AD0311484

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File: /UL/311484.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CREW LEARNING IN AN EXPERIMENTAL AIR DEFENSE ORGANIZATION

Descriptive Note:

Research memo.

Report Date:

14 Jan 1954

Media Count:

73 Page(s)

Report Number(s):

RAND/RM-1024-1

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354482

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RESIDUAL GAMMA RADIATION FROM SURFACE NUCLEAR EXPLOSIONS

Personal Author(s):

Krieger, F J

Report Date:

07 Jan 1954

Media Count:

8 Page(s)

Report Number(s):

RM1177

Report Classification:

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Technical Reports Collection

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Accession Number:

AD0107437

Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) PRELIMINARY STUDY OF TURBOJETS FOR MACH 2.75
Report Date:
05 Jan 1954
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0080118
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) EFFECTIVENESS OF GUNS, ROCKETS, AND UNORTHODOX WEAPONS FOR LOW ALTITUDE AIR
DEFENSE IN THE ZI
Personal Author(s):
DOUGHERTY, C B
TUCK, R E
Report Date:
Jan 1954
Media Count:
1 Page(s)
Report Number(s):
RM-1172
Contract Number:
AF 33(038)-6413
Report Classification:
CONFIDENTIAL
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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144271

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) BLAST DAMAGE TO RAILROAD EQUIPMENT

Personal Author(s):

GORE,L A

O'SULLIVAN,J J

Report Date:

Jan 1954

Media Count:

18 Page(s)

Report Number(s):

RM-1234

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

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52 - FORMERLY RESTRICTED DATA

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0144272

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OVERTURNING OF RIGID STRUCTURES BY BLAST WIND

Descriptive Note:

Research memo.

Personal Author(s):

GORE, L A

O'SULLIVAN, J J

Report Date:

Jan 1954

Media Count:

49 Page(s)

Report Number(s):

RM-1235

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311457

Corporate Author:

RAND CORP SANTA MONICA CA

Descriptive Note:

Research memo.

Personal Author(s):

Ansoff, H I

Sallagar, F M

Report Date:

01 Jan 1954

Media Count:

59 Page(s)

Report Number(s):

RAND/RM-1309

XC-AFRDQ

Monitor Series:

AFRDQ

Report Classification:

SECRET

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03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; JAN 1954. Other requests shall be referred to Headquarters, USAF/RDQA, RAND/ANSER Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0341106

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE USE OF ATOMIC EXPLOSIVES IN AIR DEFENSE INCLUDING SUPPLEMENTARY DATA

Personal Author(s):

Barlow,E J

Holbrook,R D

Report Date:

Jan 1954

Media Count:

41 Page(s)

Report Number(s):

RM1100

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090417

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LABOR PRODUCTIVITY IN SOVIET AND AMERICAN INDUSTRY

Personal Author(s):

GALENSON,WALTER

Report Date:

Jan 1954

Media Count:

1 Page(s)

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

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04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090414

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET NATIONAL INCOME AND PRODUCT IN 1928

Personal Author(s):

HOEFFDING,OLEG

Report Date:

Jan 1954

Media Count:

1 Page(s)

Contract Number:

AF 33(038)-6413

Report Classification:

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Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354477

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE POTENTIAL FOR DISCRIMINATION BY AIR DEFENSE RADARS,

Personal Author(s):

Hult,J L

Report Date:

20 Dec 1953

Media Count:

51 Page(s)

Report Number(s):

RM-1176

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114137

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CONSTRUCTIVE PROOF OF THE MIN-MAX THEOREM

Personal Author(s):

DANTZIG,GEORGE B

Report Date:

18 Dec 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224256

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON PARAMETRIC LINEAR PROGRAMMING,

Personal Author(s):

Manne,Alan S

Report Date:

15 Dec 1953

Media Count:

7 Page(s)

Report Number(s):

P468

Report Classification:

Unclassified

Distribution Limitation(s):

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Accession Number:

AD0087816

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GENERALIZED ANALYSIS OF AERIAL CAMPAIGNS AGAINST STRATEGIC TARGETS

Personal Author(s):

SCHAMBERG,R

Report Date:

Dec 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0339656

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ACTIVE AIR DEFENSE OF THE UNITED STATES 1954-1960

Personal Author(s):

Barlow, E J

Report Date:

01 Dec 1953

Media Count:

160 Page(s)

Report Number(s):

RAND/R-250

XC-XC

Contract Number:

AF 33(038)-6413

Monitor Series:

XC

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; OCT 1953. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC 20330. Document partially illegible. Restricted Data. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354475

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ACQUISITION AND TRACKING FR PROJECT FEED BACK,

Personal Author(s):

Vernon,R E

Gabler,R T

Report Date:

01 Dec 1953

Media Count:

52 Page(s)

Report Number(s):

RM-1162

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0337767

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MISSILE SYSTEMS FOR STRATEGIC BOMBARDMENT

Personal Author(s):

Clement,G H

Bahrman,AND C P

Report Date:

20 Nov 1953

Media Count:

86 Page(s)

Report Number(s):

R 248

Contract Number:

AF33 038 6413

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Only military offices may request from ASTIA. Others request approval of Air Force Ballistic Missile Div., P. O. Box 262, Inglewood, Cal Attn: WDSOT. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114138

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ALTERNATE ALGORITHM FOR THE REVISED SIMPLEX METHOD USING A PRODUCT FORM FOR THE INVERSE

Personal Author(s):

DANTZIG,GEORGE B
ORCHARD-HAYS,WM

Report Date:

19 Nov 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086833

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPROXIMATE THEORY OF ARMOR PENETRATION

Personal Author(s):

THOMSON,W T

Report Date:

12 Nov 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085478

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INTERCEPTION RANGES ON TYPICAL RADARS

Personal Author(s):

SOLTWEDEL, E B

HIEBERT, A L

Report Date:

Nov 1953

Media Count:

27 Page(s)

Report Number(s):

RM-1139

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Availability: Document partially illegible..

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0486461

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PHYSICAL VULNERABILITY OF STEEL MILLS.

Descriptive Note:

Research memo.,

Personal Author(s):

Peter,Marc ,Jr

Report Date:

30 Oct 1953

Media Count:

117 Page(s)

Report Number(s):

RM-1118

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution: USGO: others to Hq., USAF, Deputy Chief of Staff, Research and Development, Directorate of Operational Requirements and Development Plans, Washington, D. C. 20330. Attn: Project RAND Group (AFRDQ-R).

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114135

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DUALITY THEOREMS

Personal Author(s):

DANTZIG,GEORGE

ORDEN,ALEX

Report Date:

30 Oct 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0604244

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/604244.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MILITARY IMPLICATIONS OF NUCLEAR WEAPON DEVELOPMENTS

Personal Author(s):

Brodie, Bernard

Report Date:

30 Oct 1953

Media Count:

21 Page(s)

Report Number(s):

P-444

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114136

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPUTATIONAL ALGORITHM OF THE REVISED SIMPLEX METHOD

Personal Author(s):

DANTZIG,GEORGE B

Report Date:

26 Oct 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311326

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/311326.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRODUCIBILITY: CASE STUDY OF THE K-BOMBING SYSTEMS

Descriptive Note:

Research memo.

Personal Author(s):

Margolis, M A

Smith, R W

Report Date:

23 Oct 1953

Media Count:

75 Page(s)

Report Number(s):

RAND/RM-1155

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; OCT 1953. Other requests shall be referred to Deputy Chief of Staff, Research and Technology, USAF, Directorate of Development Planning, Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224255

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Systems Research and Personnel Management,

Report Date:

23 Oct 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0095396

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AERODYNAMIC HEATING OF BODIES DURING RE-ENTRY INTO THE EARTH'S ATMOSPHERE

Personal Author(s):

GAZLEY, C JR

Report Date:

16 Oct 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: No Forn. Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0087820

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE PREDICTION OF SEQUENCES

Personal Author(s):

BLACKWELL,DAVID

Report Date:

12 Oct 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111499

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROBABILITY OF A HIT FOR FORWARD-FIRED AIR-TO-AIR ROCKETS

Personal Author(s):

BALLANTYNE,F P

Report Date:

Sep 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354474

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ECONOMIC PRINCIPLES OF NUCLEAR MATERIALS PRODUCTION,

Personal Author(s):

Cooper,Gershon

Report Date:

26 Aug 1953

Media Count:

44 Page(s)

Report Number(s):

RM-1138

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Notice: Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354473

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RADIATION DOSE RATES IN VARIOUS TYPES OF RADIOLOGICAL WARFARE TARGETS

Descriptive Note:

Research memo.

Personal Author(s):

Hill, J E

Report Date:

17 Aug 1953

Media Count:

75 Page(s)

Report Number(s):

RAND/RM-1132

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; AUG 1953. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Directorate of Operational Requirements and Development Plans, Attn: Project Rand Group, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0080637

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SURVEY OF THE CURRENT STATUS OF THE ELECTRONIC RELIABILITY PROBLEM

Descriptive Note:

Research memo.,

Personal Author(s):

CARHART,R R

Report Date:

14 Aug 1953

Media Count:

134 Page(s)

Report Number(s):

RM-1131

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112389

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WORLDWIDE EFFECTS OF ATOMIC WEAPONS

Report Date:

06 Aug 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADC065096

Corporate Author:

RAND CORP SANTA MONICA CA

Report Date:

06 Aug 1953

Media Count:

106 Page(s)

Report Number(s):

R-251-AEC

XJ-XD

Contract Number:

AF33(038)-6413

AT(11-1)-135

Monitor Series:

XD

Report Classification:

SECRET

Distribution Limitation(s):

15 - CONTROLLED; NON-DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Distribution: Further dissemination only as directed by Dept. of Energy, Washington, DC 20585.

Restricted Data

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085418

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DEPLOYMENT AND EMPLOYMENT OF ENEMY 1955 FIGHTER DEFENSES AGAINST HIGH ALTITUDE CARRIERS

Personal Author(s):

ELLIS,J W JR

MURROW,R B

STURDEVANT,C V

Report Date:

Aug 1953

Media Count:

1 Page(s)

Report Number(s):

RM-828

Contract Number:

AF33(038)-6413

Report Classification:

SECRET

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085411

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ELECTRONIC RECONNAISSANCE CONFERENCE MAY 5-6, 1953

Descriptive Note:

Summary rept.

Personal Author(s):

HIEBERT, A L

Report Date:

Aug 1953

Media Count:

1 Page(s)

Report Number(s):

S-15

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085477

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

RAYMOND, R C

Report Date:

Aug 1953

Media Count:

11 Page(s)

Report Number(s):

RM-1122

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0086834

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EMPIRICAL METHOD FOR THE PREDICTION OF AIRPLANE DRAG DIVERGENCE MACH NUMBER

Personal Author(s):

JOHNSON,R P

Report Date:

Aug 1953

Media Count:

32 Page(s)

Report Number(s):

RM-1188

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB971332

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Fatigue Analysis of Aircraft Structures.

Personal Author(s):

Shanley, F R

Report Date:

31 Jul 1953

Media Count:

73 Page(s)

Report Number(s):

RM-1127

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC user's only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0107436

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYSIS OF THE AIRCRAFT FLYING CYCLE

Personal Author(s):

LAVALLEE,R S

Report Date:

Jul 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0102898

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) FURTHER COMMENTS ON A RADAR ANTIJAMMING TECHNIQUE WITH PARTICULAR APPLICATION TO BOMBSIGHTS

Personal Author(s):

MARCUM, J I

Report Date:

Jul 1953

Media Count:

1 Page(s)

Report Number(s):

RM-1114

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224251

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Methods of Reducing Samples Size in Monte Carlo Computations,

Report Date:

11 Jun 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0354478

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EFFECTIVENESS OF A-BOMBS AGAINST AIRFIELDS,

Personal Author(s):

Giamboni, L A

Siska, C P

Report Date:

08 Jun 1953

Media Count:

26 Page(s)

Report Number(s):

RM-1105

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

51 - RESTRICTED DATA

Distribution Statement:

Notice: Release or announcement to foreign governments or their nationals is not authorized.

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111498

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ESTIMATED RUSSIAN LOCAL DEFENSE EFFECTIVENESS AGAINST LOW ALTITUDE ATTACK IN 1960

Personal Author(s):

TUCK, R E

AUGENSTEIN, B W

Report Date:

Jun 1953

Media Count:

1 Page(s)

Report Number(s):

RM-1106

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085475

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Electronic Countermeasures against Air Defense Systems.

Personal Author(s):

HULT, J L

Report Date:

Jun 1953

Media Count:

35 Page(s)

Report Number(s):

RM-1090

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085476

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ANALYSIS OF ERRORS IN A SECOND ORDER, DOPPLER DAMPED, ACCELEROMETER GUIDANCE SYSTEM

Personal Author(s):

STEARNS,E V

VERNON,R E

Report Date:

Jun 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0090415

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOVIET NATIONAL INCOME AND PRODUCT 1940-1948

Personal Author(s):

BERGSON,ABRAM

HEYMANN,HANS JR

Report Date:

Jun 1953

Media Count:

1 Page(s)

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0101886

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROCESS ANALYSIS OF THE METAL WORKING INDUSTRIES

Personal Author(s):

MARKOWITZ,HARRY

Report Date:

12 May 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114194

Corporate Author:

RAND CORP SANTA MONICA CALIF

Personal Author(s):

GARTHOFF,R L

Report Date:

May 1953

Media Count:

1 Page(s)

Contract Number:

AF 33(038)-6413

Report Classification:

SECRET

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111497

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) IDENTIFICATION PROCEDURES FOR AIR DEFENSE

Personal Author(s):

ATTAWAY, L D

BARLOW, E J

Report Date:

May 1953

Media Count:

1 Page(s)

Report Number(s):

RM-1078

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085474

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXAMINATION OF A SUBSONIC AREA DEFENSE MISSILE WITH LOW ALTITUDE CAPABILITY

Personal Author(s):

BARLOW,E J

WHITE,W B

MALLET,J D

Report Date:

May 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0019992

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/019992.pdf

Size: 33 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET MILITARY DOCTRINE

Personal Author(s):

Garthoff, R L

Report Date:

May 1953

Media Count:

586 Page(s)

Report Number(s):

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 1953. Other requests shall be referred to Deputy Chief of Staff Research and Development, Attn: AF, Washington, DC. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111496

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CONTIGUOUS RADAR COVERAGE IN THE U.S. AIR DEFENSE SYSTEM 1953-1956

Personal Author(s):

BARLOW, E J

Report Date:

May 1953

Media Count:

1 Page(s)

Report Number(s):

RM-1077

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224253

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Sense Data in Robots ad Organisms,

Report Date:

01 May 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0101881

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DATA HANDLING SYSTEMS FOR AIR DEFENSE

Personal Author(s):

DADANT, P M

REICH, E

Report Date:

May 1953

Media Count:

1 Page(s)

Report Number(s):

RM-1079

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0102899

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ELECTRONIC COUNTERMEASURES AGAINST U. S. AIR DEFENSE 1953-1960

Personal Author(s):

BARLOW, E J

Report Date:

May 1953

Media Count:

1 Page(s)

Report Number(s):

RM-1080

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0354460
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) THE USE OF ATOMIC EXPLOSIVES IN AIR DEFENSE,
Personal Author(s):
Barlow,E J
Holbrook,R D
Report Date:
01 May 1953
Media Count:
58 Page(s)
Report Number(s):
RM-1082
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0144270
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) A METHOD OF PREDICTING THE BLAST FROM AN AIR BURST ATOMIC BOMB WITH CORRECTIONS
FOR NON-UNIFORM ATMOSPHERIC EFFECTS AND REFLECTIONS
Personal Author(s):
BRODE, HAROLD L
Report Date:
20 Apr 1953
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085473

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A GENERALIZED FORM FOR THE GAME SOLUTION OF A CLASS OF BOMBERS VS. FIGHTER DUELS
WITH APPLICATIONS

Personal Author(s):

BALLANTYNE,F P

MCGLONE,D B

Report Date:

03 Apr 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311488

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/311488.pdf

Size: 4 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ELECTRONIC CONSIDERATIONS FOR MISSILE RECONNAISSANCE

Descriptive Note:

Research memo.

Personal Author(s):

Larmore, L E

Report Date:

02 Apr 1953

Media Count:

59 Page(s)

Report Number(s):

RAND/RM-1065

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1953. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of Staff, Development, Hq, USAF, Project Rand Office, Washington DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311487

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OVERPRESSURES REQUIRED TO DAMAGE PARKED AIRCRAFT,

Personal Author(s):

Giamboni, L A

Report Date:

01 Apr 1953

Media Count:

17 Page(s)

Report Number(s):

RM1061

Contract Number:

AF49(638)700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111172

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) CHAIN RELIABILITY: A SIMPLE FAILURE MODEL FOR COMPLEX MECHANISMS

Personal Author(s):

HOWARD,W J

Report Date:

27 Mar 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0102894

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME CONSIDERATIONS OF OPTIMUM ANTENNA DESIGN FOR BOMBING OR MAPPING RADARS

Personal Author(s):

MARCUM, J I

Report Date:

Mar 1953

Media Count:

1 Page(s)

Report Number(s):

RM-1060

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0097067

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN INVESTIGATION OF ATMOSPHERIC PROPERTIES AT GREAT ALTITUDES

Personal Author(s):

KALLMANN,H F

Report Date:

27 Feb 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0082110

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COMPONENTS OF STELLAR-INERTIAL NAVIGATION SYSTEMS

Personal Author(s):

STEARS,E V

Report Date:

Feb 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0156002

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Factors Affecting the Experience Composition of Airmen in USAF Job Categories: A Mathematical Approach,

Report Date:

30 Jan 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311483

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN INTERDICTION STUDY RAIL BRIDGE AND LINE-CUTTING PHASE

Personal Author(s):

Harris, T E

Brown, Bernice

Ross, F S

Report Date:

13 Jan 1953

Media Count:

211 Page(s)

Report Number(s):

RAND-RM-1022-1

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; 13 JAN 1953. Other requests shall be referred to Air Force Headquarters, Directorate of Development Planning, Attn: AFRDP, Washington, DC, 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311485

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RADAR TRACKING IN PROJECT FEEDBACK

Descriptive Note:

Research memo.

Personal Author(s):

Gabler, R T

Vernon, R E

Report Date:

13 Jan 1953

Media Count:

39 Page(s)

Report Number(s):

RAND/RM-1025

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JAN 1953. Other requests shall be referred to Hqs., USAF, Directorate of Development Planning, Attn: AFRDP/Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224790

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) RETAIL FOOD PRICES IN THE USSR, 1937-1948.
Personal Author(s):
Chapman,Janet G
Report Date:
13 Jan 1953
Media Count:
117 Page(s)
Report Number(s):
RM707 1
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE
Distribution Statement:
No Foreign.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0007498
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/007498.pdf
Size: 993 KB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) A SUMMARY OF KNOWN DISTRIBUTION FUNCTIONS
Descriptive Note:
Journal article
Personal Author(s):
HALLER, B
Report Date:
07 Jan 1953
Media Count:
32 Page(s)

Report Number(s):

RAND-T-27

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 07 JAN 1953. Other requests shall be referred to Air Force Research and Development Command, Attn: Project Rand, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311421

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE INFLUENCE OF VARIABLE OFFENSE AND DEFENSE STRATEGIES ON THE SELECTION OF TACTICAL A-BOMB CARRIERS

Descriptive Note:

Research memo.

Personal Author(s):

Emerson, D E

Report Date:

06 Jan 1953

Media Count:

36 Page(s)

Report Number(s):

RAND/RM-1018

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

52 - FORMERLY RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; JAN 1953. Other requests shall be referred to Directorate of Development Planning, Deputy Chief of Staff Research and Development (USAF), AFRDP, Attn: Project Rand Office, Washington, DC 20330. Formerly Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224220

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/224220.pdf

Size: 4 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Attitude Sensing and Control for a Satellite Vehicle

Personal Author(s):

Roberson, Robert E

Report Date:

02 Jan 1953

Media Count:

113 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 02 JAN 1953. Other requests shall be referred to Department of the Air Force, Attn: Public affairs Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085472

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TRACKING AND SMOOTHING ACCURACY WITH DIGITAL C.D.S.

Personal Author(s):

REICH,EDGAR

Report Date:

Jan 1953

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311719

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A COMPARISON OF FUTURE STRATEGIC BOMBING SYSTEMS UTILIZING GRAVITY BOMBS AND AIR-TOSURFACE MISSILES,

Personal Author(s):

Ellis,J W

Murrow,R B

Report Date:

01 Jan 1953

Media Count:

110 Page(s)

Report Number(s):

RM864

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Release only to U. S. Government agencies is authorized. Other certified requesters shall obtain release approval from Director of Development Planning, AFRDP, Hqs., USAF, Washington, D. C. Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB183534

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Turboprop Engine Characteristics.

Report Date:

11 Dec 1952

Media Count:

91 Page(s)

Report Number(s):

RM-1009

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: DTIC users only. Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224252

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ACTIVITY ANALYSIS AND ITS APPLICATIONS,

Personal Author(s):

Koopmans,Tjalling C

Report Date:

10 Dec 1952

Media Count:

14 Page(s)

Report Number(s):

P352

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112145

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METHODS OF EVALUATION OF DEFENSE WEAPONS

Personal Author(s):

WHITE,W B

Report Date:

Dec 1952

Media Count:

1 Page(s)

Report Number(s):

S-10

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0107435

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A THEORY OF THE HYDROGEN GUN

Personal Author(s):

AUGENSTEIN,B W

Report Date:

Dec 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311486

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) DISTANT EARLY WARNING IN THE DEFENSE OF THE UNITED STATES

Descriptive Note:

Research memo.

Personal Author(s):

Barlow, E J

Report Date:

24 Nov 1952

Media Count:

80 Page(s)

Report Number(s):

RAND/RM-1031

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff Research and Development (Air Force), Attn: Project Rand Office, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0007168

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/007168.pdf

Size: 800 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE VULNERABILITY OF AIRCRAFT TO CHEMICAL AND BIOLOGICAL WEAPONS

Descriptive Note:

Research memo.

Personal Author(s):

MORRIS, HUMBERT

Report Date:

21 Nov 1952

Media Count:

16 Page(s)

Report Number(s):

RAND-RM-996

XC-USAF

Contract Number:

W-33-038-AC-14105

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Nov 1952. Other requests shall be referred to Department of the Air Force, Attn: Project Rand Office, Washington, DC 20330., Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0002288

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/002288.pdf

Size: 11 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) STUDY OF MODERATE RANGE BALLISTIC MISSILES

Descriptive Note:

Research memo

Personal Author(s):

HIGGINS, T P , Jr

HEFFERN, E C

Report Date:

17 Nov 1952

Media Count:

113 Page(s)

Report Number(s):

RAND/RM-988

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Nov 1952. Other requests shall be referred to Hqs., USAF, Directorate of Operational Requirements and Development Plans, Attn: Project Rand Group, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224080

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MISSILE SYSTEMS FOR STRATEGIC BOMBARDMENT: COMPUTATIONAL MODEL,

Personal Author(s):

Quade, E S

Report Date:

10 Nov 1952

Media Count:

67 Page(s)

Report Number(s):

RM-986

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Notice: Only military offices may request from DDC. Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111390

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A STUDY OF SHORT RANGE, SUPERSONIC, ROCKET PROPELLED AIR-TO-SURFACE MISSILES

Personal Author(s):

CULP,C R

KOCH,H A

LIESKE,H A

Report Date:

Nov 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0107262

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PERFORMANCE ANALYSIS METHODS FOR THE TWIN SPOOL, HIGH PRESSURE RATIO, TURBOJET ENGINE

Personal Author(s):

WOODWORTH,L R

Report Date:

15 Oct 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311482

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GERMAN STUDIES. WEST GERMAN ATTITUDES RELEVANT TO WESTERN DEFENSE AS SHOWN BY OPINION POLLS

Descriptive Note:

Research memo.

Personal Author(s):

Davison, W P

Joseph, J H

Report Date:

15 Oct 1952

Media Count:

98 Page(s)

Report Number(s):

RAND/RM-966

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff Research and Development (Air Force), Attn: RAND Project Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0145855

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DEPLOYMENT AND EMPLOYMENT OF ENEMY 1960 FIGHTER DEFENSES AGAINST HIGH ALTITUDE CARRIERS

Personal Author(s):

MURROW,R B

ELLIS JR ,J W

Report Date:

01 Oct 1952

Media Count:

1 Page(s)

Report Number(s):

RM-806-1

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0105317

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PRELIMINARY EXAMINATION OF POSSIBLE INFRARED COUNTERMEASURES FOR AIRCRAFT

Personal Author(s):

GREENFIELD,S M

Report Date:

Oct 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116574

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

MARCUM, J T

Report Date:

Oct 1952

Media Count:

1 Page(s)

Report Number(s):

RM-965

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB249147

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/b249147.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Reactions of Civilian Populations to Air Attacks by Friendly Forces.

Descriptive Note:

Research memo.,

Personal Author(s):

Hungerford, Jean

Report Date:

02 Sep 1952

Media Count:

46 Page(s)

Report Number(s):

RAND/RM-925

X0-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085420

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AIRCRAFT REPORTING WITH CHAFF SIGNALS

Personal Author(s):

HUTT,J L

KOCH,H A

Report Date:

Sep 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111389

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LONG RANGE MISSILE GUIDANCE FUNDAMENTALS

Personal Author(s):

FRYE,W E

Report Date:

Sep 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224791

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) OBSERVATIONS AND COMMENTS ON THE ORGANIZATION STUDIES OF THE SYSTEMS RESEARCH
LABORATORY.

Personal Author(s):

Simon,Herbert A

Report Date:

29 Aug 1952

Media Count:

33 Page(s)

Report Number(s):

RM922

Contract Number:

AF 49(638)700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116571

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN N-PLANE BOMBING MODEL

Personal Author(s):

HAUSNER,MELVIN

Report Date:

15 Aug 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116572

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) STRATEGIC INDEPENDENCE IN A SIMPLE BOMBING MODEL

Personal Author(s):

WENDEL,J G

Report Date:

15 Aug 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB183718

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Axial and Normal Force Coefficients for Pointed Bodies of Revolution at Super- and Hypersonic Speeds. Part 2. Boattails.

Personal Author(s):

Huth, J H

Dye, H M

Report Date:

05 Aug 1952

Media Count:

17 Page(s)

Report Number(s):

RM-905

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: DTIC users only. Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB801845

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Some Aspects of High Altitude Operation of Turbo-Pump, Liquid Propellant Rocket Propulsion Systems - and Appendixes A and B - Research Memorandum Project Rand,

Personal Author(s):

Koch, H A

Report Date:

05 Aug 1952

Media Count:

31 Page(s)

Report Number(s):

RM-904

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

DISTRIBUTION AUTHORIZED TO DOD ONLY; ADMINISTRATIVE/OPERATIONAL USE; 24 FEB 1999. OTHER REQUESTS SHALL BE REFERRED THROUGH DEFENSE TECHNICAL INFORMATION CENTER, DTIC-BCS, 8725 JOHN J KINGMAN RD., FT. BELVOIR, VA 22060-6218

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224250

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NUMERICAL REPRESENTATIONS OF TECHNOLOGICAL CHANGE.

Personal Author(s):

Debreu, Gerard

Report Date:

04 Aug 1952

Media Count:

17 Page(s)

Report Number(s):

P-310

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112144

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESTIMATES OF THE PROBABILITY OF KILL OF A LOW ALTITUDE STRATEGIC BOMBER BY A FIGHTER OF THE 1960 SOVIET AREA DEFENSES

Personal Author(s):

LAVIN,M M

Report Date:

Aug 1952

Media Count:

1 Page(s)

Report Number(s):

RM-932

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116573

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF THE PROBABILITY OF VISUAL DETECTION APPLYING TO PATROL OPERATIONS AGAINST LOW ALTITUDE STRATEGIC BOMBERS

Personal Author(s):

LAVIN,M M

WILSON,J A

Report Date:

Aug 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116570

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN EVALUATION PROCEDURE FOR DETERMINING PREFERRED LOW-ALTITUDE STRATEGIC BOMBING SYSTEMS

Personal Author(s):

RUMPH,L B

SCHAMBERG,R

Report Date:

Aug 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224249

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SURVEY OF INPUT-OUTPUT RESEARCH.

Personal Author(s):

Shephard,Ronald W

Report Date:

17 Jul 1952

Media Count:

80 Page(s)

Report Number(s):

P-309

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0446947

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THERMAL RADIATION AND AIRCRAFT ESCAPE PROBLEM FOR LARGE YIELD BOMBS,

Personal Author(s):

Elswick,W R

Report Date:

10 Jul 1952

Media Count:

9 Page(s)

Report Number(s):

RM867

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311481

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) IMPLICATIONS OF POTENTIAL WEAPON DEVELOPMENTS FOR STRATEGIC BOMBING AND AIR
DEFENSE

Descriptive Note:

Research memo.

Personal Author(s):

Hitch, C J

Capron, W M

Report Date:

10 Jul 1952

Media Count:

63 Page(s)

Report Number(s):

RAND/RM-868

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff Research and Development (Air Force), Attn: Project
Rand Office, Washington, DC 20330. Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0098443

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INFRARED RADIATION FROM CELESTIAL BODIES

Personal Author(s):

LARMORE, L

Report Date:

26 Jun 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution Controlled. All requests to Dept of the Air Force, Attn: Public Affairs Office, Washington, DC

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311419

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THERMO-NUCLEAR ATTACK ON AN ARMY GROUP,

Personal Author(s):

Paxson, E W

Report Date:

16 Jun 1952

Media Count:

30 Page(s)

Report Number(s):

RM869

Report Classification:

SECRET

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

51 - RESTRICTED DATA

Distribution Statement:

Notice: Release only to U. S. Government agencies is authorized. Other certified requesters shall obtain release approval from Director of Development Planning, AFRDP, Hqs., USAF, Wash. 25, D. C. Release or announcement to foreign governments or their nationals is not authorized.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085346

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE GENERALIZED OUTCOME OF A CLASS OF MACHINE GUN DUELS

Personal Author(s):

GOMPF,GI E

Report Date:

13 Jun 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311480

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE TIME DEPENDENCE OF THERMAL RADIATION FROM A NUCLEAR EXPLOSION

Descriptive Note:

Research memo.

Personal Author(s):

Latter, Richard

Report Date:

12 Jun 1952

Media Count:

11 Page(s)

Report Number(s):

RAND/RM-865

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUN 1952. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: Project Rand Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB800577

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Note on Directional Effects of Pressure Field of Moving Blast.

Descriptive Note:

Research memo.,

Personal Author(s):

Cole, J D

Report Date:

09 Jun 1952

Media Count:

14 Page(s)

Report Number(s):

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

DISTRIBUTION AUTHORIZED TO DOD ONLY; ADMINISTRATIVE/OPERATIONAL USE; 24 FEB 1999. OTHER REQUESTS SHALL BE REFERRED THROUGH DEFENSE TECHNICAL INFORMATION CENTER, DTIC-BCS, 8725 JOHN J KINGMAN RD., FT. BELVOIR, VA 22060-6218

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085419

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYSIS OF THE OUTCOME OF AN ENGAGEMENT BETWEEN A FIXED GUN FIGHTER AND A TURRETED BOMBER

Personal Author(s):

BALLANTYNE,F P

EMERSON,D E

WILSON,J A

Report Date:

Jun 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111388

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PROBABILITY OF ATTACK AND KILL OF HIGH ALTITUDE BOMBERS BY ENEMY 1960 FIGHTERS

Personal Author(s):

DENNIS, W B

Report Date:

Jun 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111387

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PROBABILITY OF ATTACK AND KILL OF HIGH ALTITUDE BOMBERS BY ENEMY 1955 FIGHTERS

Personal Author(s):

DENNIS, W B

BROM, J R

STILLMAN, W P

Report Date:

Jun 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114195

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE COST OF DECREASING VULNERABILITY OF AIR BASES BY DISPERSAL. DISPERSING A B-36 WING

Report Date:

Jun 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224248

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EMOTIONAL STRESS AND AIR WAR. A LECTURE GIVEN AT THE AIR WAR COLLEGE AIR UNIVERSITY, 28
NOVEMBER 1951,

Personal Author(s):

George,Alexander L

Report Date:

27 May 1952

Media Count:

27 Page(s)

Report Number(s):

P302

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB185915

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Axial and Normal Force Coefficients for Pointed Bodies of Revolution at Supersonic and Hypersonic Speeds. Part 1. Noses and Cylinders.

Personal Author(s):

Huth, J H

Dye, H

Report Date:

21 May 1952

Media Count:

17 Page(s)

Report Number(s):

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB800576

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Axial and Normal Fore Coefficients for Pointed Bodies of Revolution at Super- and Hypersonic Speeds. Part 1. Noses and Cylinders.

Descriptive Note:

Research memo.,

Personal Author(s):

Huth, J H

Dye, H

Report Date:

21 May 1952

Media Count:

16 Page(s)

Report Number(s):

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB801848

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Physical Properties of the Upper Atmosphere - Research Memorandum - Project Rand,

Personal Author(s):

Kallmann, H K

Report Date:

12 May 1952

Media Count:

23 Page(s)

Report Number(s):

RM-841

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

DISTRIBUTION AUTHORIZED TO DOD ONLY; ADMINISTRATIVE/OPERATIONAL USE; 24 FEB 1999. OTHER REQUESTS SHALL BE REFERRED THROUGH DEFENSE TECHNICAL INFORMATION CENTER, DTIC-BCS, 8725 JOHN J KINGMAN RD., FT. BELVOIR, VA 22060-6218

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0293672

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THEORY OF ERRORS IN AUTOMATIC NAVIGATION WITH INTERGRATING ACCELEROMETER SYSTEMS

Personal Author(s):

BROWNE,S H

GILVARRY,J J

Report Date:

05 May 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB801820

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Theory of Errors in Automatic Navigation with Integrating Accelerometer Systems,

Personal Author(s):

Browne, S H

Gilvarry, J J

Report Date:

05 May 1952

Media Count:

23 Page(s)

Report Number(s):

R-154

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

DISTRIBUTION AUTHORIZED TO DOD ONLY; ADMINISTRATIVE/OPERATIONAL USE; 24 FEB 1999. OTHER REQUESTS SHALL BE REFERRED THROUGH DEFENSE TECHNICAL INFORMATION CENTER, DTIC-BCS, 8725 JOHN J KINGMAN RD., FT. BELVOIR, VA 22060-6218

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0107263

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TABULATED RESULTS OF HOT GAS GENERATOR CYCLE CALCULATIONS

Personal Author(s):

KELBER, C C

WOODWORTH, L R

Report Date:

02 May 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0105319

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SURVEY OF SELF-CONTAINED NAVIGATION SYSTEMS

Personal Author(s):

FRYE, W E

STEARNS, E V

Report Date:

May 1952

Media Count:

1 Page(s)

Report Number(s):

RM-756-1

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0106392

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ON THE OPTIMAL USE OF GUIDED MISSILES

Personal Author(s):

BELLMAN, RICHARD

Report Date:

16 Apr 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0000713

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/000713.pdf

Size: 4 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ECONOMIC REPLACEMENT POLICY

Personal Author(s):

ALCHIAN, ARMEN A

Report Date:

12 Apr 1952

Media Count:

135 Page(s)

Report Number(s):

R-224

XC-AFRDC

Contract Number:

W33-038-AC-14105

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 12 APR 1952. Other requests shall be referred to Deputy Chief of Staff for Research and Development, Department of the Air Force, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0108320

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EXPECTED COVERAGE OF RECTANGULAR TARGETS BY CIRCULAR BOMBS

Personal Author(s):

MICKEY, RAY

Report Date:

09 Apr 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0108421

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXPECTED DAMAGE FROM ONE BOMB TO A CIRCULAR RING

Personal Author(s):

FLEMING,W

Report Date:

Apr 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0093610

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/093610.pdf

Size: 9 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) INFRARED RADIATION FOR THE DETECTION OF AIRBORNE TARGETS

Personal Author(s):

Kellogg, W N

Greenfield, S M

Report Date:

01 Apr 1952

Media Count:

167 Page(s)

Report Number(s):

RM-784

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 01 APR 1952. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224247

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EFFICIENT TRANSPORTATION IN NETWORKS,

Personal Author(s):

Beckmann,Martin

Report Date:
19 Mar 1952
Media Count:
5 Page(s)
Report Number(s):
P282
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0338609
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) PRELIMINARY COMPARISON OF SURFACE AND SUBSURFACE ATOMIC EXPLOSIONS
Personal Author(s):
Gilvarry,J J
Hill,J E
Cohen,S T
Report Date:
14 Mar 1952
Media Count:
16 Page(s)
Report Number(s):
RM877
Report Classification:
SECRET
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS
51 - RESTRICTED DATA
Distribution Statement:
Not releasable to foreign nationals.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0093608

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/093608.pdf

Size: 749 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) OFFSET CIRCLE PROBABILITIES

Report Date:

14 Mar 1952

Media Count:

21 Page(s)

Report Number(s):

R-234

XD-DOD

Monitor Series:

DOD

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 14 MAR 1952. Other requests shall be referred to Department of Defense, Attn: Public Affairs Office, Washington, DC 20301.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116569

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/116569.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A SIMPLIFIED STUDY OF RECONNAISSANCE IN STRATEGIC BOMBING CAMPAIGNS

Descriptive Note:

Research rept.

Personal Author(s):

KAHN, H

MARSHALL, A W

Report Date:

06 Mar 1952

Media Count:

38 Page(s)

Report Number(s):

RM-787

XC-USAF

Contract Number:

AF 33(038)-6413

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Mar 1952. Other requests shall be referred to Department of the Air Force, Attn: Air Force Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0008127

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/008127.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ECONOMIC COMPARISON OF INTERCONTINENTAL AIRPLANE SYSTEMS FOR STRATEGIC BOMBING

Personal Author(s):

Rumph, L B

Enke, S

Report Date:

01 Mar 1952

Media Count:

69 Page(s)

Report Number(s):

R-229

XC-AFRDC

Contract Number:

W33-038-AC-14105

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to DoD only; Direct Military Support; 01 MAR 1952. Other requests shall be referred to Air Force Research and Development Command, Attn: Rand Project, Pentagon, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224246

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Ordered Vector Spaces,

Report Date:

22 Feb 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0007169

Full Text (pdf) Availability:

[View Full Text \(pdf\)](#)

File: /UL/007169.pdf

Size: 3 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRELIMINARY INVESTIGATION OF INTERCEPTOR EFFECTIVENESS AGAINST A SUPERSONIC BOMBER FAMILY

Descriptive Note:

Research memo.

Report Date:

18 Jan 1952

Media Count:

52 Page(s)

Report Number(s):

RAND-RM-782

XC-USAF

Contract Number:

W-33-038-AC-14105

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; 18 JAN 1952. Other requests shall be referred to Department of the Air Force, ATTN: Public Affairs Office, Washington, DC 20330.

Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0107351

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLE METHOD FOR CALCULATING THE THRUST OF TURBOJET ENGINES WITH UNDER-EXPANDED, CONVERGENT EXHAUST NOZZLES

Personal Author(s):

WOODWORTH,L R

Report Date:

11 Jan 1952

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116585

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) MISSILE BOMB DAMAGE ASSESSMENT SYSTEMS

Personal Author(s):

WYLLY, A

Report Date:

Jan 1952

Media Count:

1 Page(s)

Report Number(s):

S-9

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111385

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

LIND, J R

MCGLONE, D B

WILSON, J A

Report Date:

Jan 1952

Media Count:

1 Page(s)

Report Number(s):

RM-771

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311479

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PASSIVE DETECTION OF THE AN/APN-66

Personal Author(s):

Hult, J L

Report Date:

19 Dec 1951

Media Count:

12 Page(s)

Report Number(s):

RAND/RM-751

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff Research and Development (Air Force), Directorate of Development Planning, Attn: Project Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116568

Full Text (pdf) Availability:

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File: /UL/116568.pdf

Size: 616 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PHASE COHERENCE OF REFLECTIONS FROM SCATTERERS

Personal Author(s):

REICH, E

Report Date:

18 Dec 1951

Media Count:

11 Page(s)

Report Number(s):

RAND-RM-748

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

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02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 18 DEC 1951. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224782

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE TRAJECTORIES OF SURFACE FRAGMENTS SUBSEQUENT TO AN UNDERGROUND EXPLOSION.

Personal Author(s):

Paxson ,E W

Mengel,A S

Report Date:

11 Dec 1951

Media Count:

18 Page(s)

Report Number(s):

RM743

Contract Number:

AF49 638 700

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224257

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Notes on the Optimal Choice of Weapons,

Report Date:

30 Nov 1951

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224245

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Games of Pursuit,
Report Date:
17 Nov 1951
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0144261
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) RESUME OF AERIAL NAVIGATION FOR LONG-RANGE BOMBERS
Personal Author(s):
DADANT, P M
Report Date:
12 Nov 1951
Media Count:
1 Page(s)
Report Classification:
Unclassified
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02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0110883
Corporate Author:
RAND CORP SANTA MONICA CALIF
Report Date:
Nov 1951
Media Count:
1 Page(s)
Report Number(s):
RM-561
Contract Number:
AF33(038)-6413
Report Classification:
SECRET
Distribution Limitation(s):
09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0116567
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) TIME, EQUIPMENT, AND COSTS TO REPAIR CRATERED RUNWAYS
Personal Author(s):
O'SULLIVAN,J J
Report Date:
Nov 1951
Media Count:
1 Page(s)
Report Number(s):
RM-730
Contract Number:
AF33(038)-6413
Report Classification:
CONFIDENTIAL
Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311325

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ECONOMIC EFFECTS OF BOMBING ELECTRICAL POWER SYSTEMS. PART 4. PACIFIC GAS AND ELECTRIC COMPANY

Descriptive Note:

Research memo.

Report Date:

Nov 1951

Media Count:

62 Page(s)

Report Number(s):

RAND/RM-699-PT-4

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

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02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311324

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ECONOMIC EFFECTS OF BOMBING ELECTRIC POWER SYSTEMS. PART 3. BONNEVILLE SYSTEM --
NORTHWEST POWER POOL

Descriptive Note:

Research memo.

Report Date:

Nov 1951

Media Count:

173 Page(s)

Report Number(s):

RAND/RM-699-PT-3

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

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CONFIDENTIAL

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02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

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NOV 1951. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air
Force), Directorate of Development Planning, Washington, DC 20330. Document partially illegible.
NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311322

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ECONOMIC EFFECTS OF BOMBING ELECTRIC POWER SYSTEMS. PART 1. AMERICAN GAS AND ELECTRIC COMPANY

Descriptive Note:

Research memo.

Report Date:

Nov 1951

Media Count:

110 Page(s)

Report Number(s):

RAND/RM-699-PT-1

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

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02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; NOV 1951. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Directorate of Development Planning, Washington, DC 20330. Document partially illegible. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311323

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) ECONOMIC EFFECTS OF BOMBING ELECTRIC POWER SYSTEMS. PART 2. DETROIT EDISON COMPANY

Descriptive Note:

Research memo.

Report Date:

Nov 1951

Media Count:

54 Page(s)

Report Number(s):

RAND/RM-699-PT-2

XC-AFRDC

Contract Number:

AF 49(638)-700

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

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02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

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Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; NOV 1951. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Directorate of Development Planning, Washington, DC 20330. Document partially illegible. NOFORN.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0107434

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE AXIAL PRESSURE FORCE ON AN INCLINED BODY OF REVOLUTION IN SUPERSONIC FLOW

Personal Author(s):

VAN DYKE,MILTON D

Report Date:

Oct 1951

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112384

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ESTIMATE OF "GLINT" NOISE FROM RADAR TRACKING DATA

Personal Author(s):

GABLER,R T

Report Date:

10 Sep 1951

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB184733

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/b184733.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Analysis of Stress-Strain-Time Relations from the Engineering Viewpoint

Descriptive Note:

Conference paper

Personal Author(s):

Shanley, F R

Report Date:

Sep 1951

Media Count:

42 Page(s)

Report Number(s):

P-68-REV

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; SEP 1951. Other requests shall be referred to Deputy Chief of Staff Research and Development, Department of the Air Force, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224789

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON THE PROBLEM OF AGGREGATION.

Personal Author(s):

Arrow ,K

Barankin ,E W

Shephard,R W

Report Date:

28 Aug 1951

Media Count:

9 Page(s)
Report Number(s):
RM674
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
ADB812570
Full Text (pdf) Availability:
[View Full Text \(pdf\)](#)
File: /UL/b812570.pdf
Size: 25 MB
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) Service Conditions and Morale in the Soviet Armed Forces: A Pilot Study - The Soviet Army - and
Appendixes 1 and 2. Volume 1.
Personal Author(s):
Dicks, Henry V
Shils, Edward A
Dinerstein, Herbert S
Report Date:
25 Aug 1951
Media Count:
2 Page(s)
Report Number(s):
RAND-R-213
X0-XD
Monitor Series:
XD
Report Classification:
Unclassified
Distribution Limitation(s):
04 - DOD ONLY; DOD CONTROLLED

26 - NOT AVAILABLE IN MICROFICHE

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution authorized to DoD only; Administrative/Operational Use; 5 Feb 99. Other requests shall be referred through Defense Technical Information Center, DTIC-BCS, 8725 John J. Kingman Rd., Ft. Belvoir, VA 22060-6218., Availability: Hard copy only., Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224788

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NEURAL NETS FOR TOAD T1.

Personal Author(s):

Householder,A S

Report Date:

23 Aug 1951

Media Count:

9 Page(s)

Report Number(s):

RM671

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224244

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On the Application of Servomechanism Theory in the Study of Production Control. A Study in the Theory of Organization,

Report Date:

15 Aug 1951

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB254648

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Human Factors in Air-to-Ground Interdiction Operations in the Korean War

Descriptive Note:

Research memorandum,

Personal Author(s):

George, Alexander L

Report Date:

01 Aug 1951

Media Count:

106 Page(s)

Report Number(s):

RAND/RM-659

XC-USAF

Contract Number:

AF-49(638)-700

Monitor Series:

USAF

Report Classification:

Unclassified

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05 - CONTROLLED; DOD CONTROLLED

Distribution Statement:

Distribution: Further dissemination only as directed by Department of the Air Force, Washington, DC 20330, Jun 2000 or higher DoD authority.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116566

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A TRANSPORTATION PROBLEM

Personal Author(s):

BELLMAN,RICHARD

Report Date:

16 Jul 1951

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB219675

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/b219675.pdf

Size: 489 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) On a General Class of Problems Involving Sequential Analysis,

Personal Author(s):

Bellman, R E

Report Date:

16 Jul 1951

Media Count:

12 Page(s)

Report Number(s):

RAND/RM-647

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: DTIC users only., Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB801847

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Calculation of the Viscosity of Gas Mixtures - Research Memorandum - Project Rand,

Personal Author(s):

Krieger, F J

Report Date:

13 Jul 1951

Media Count:

13 Page(s)

Report Number(s):

RM-649

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

DISTRIBUTION AUTHORIZED TO DOD ONLY; ADMINISTRATIVE/OPERATIONAL USE; 24 FEB 1999. OTHER REQUESTS SHALL BE REFERRED THROUGH DEFENSE TECHNICAL INFORMATION CENTER, DTIC-BCS, 8725 JOHN J KINGMAN RD., FT. BELVOIR, VA 22060-6218

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224787

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EXTRACTING ROOTS OF POLYNOMIAL EQUATIONS.

Personal Author(s):

Greenwald,Irwin D

Report Date:

09 Jul 1951

Media Count:

3 Page(s)

Report Number(s):

RM644

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB801846

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Viscosity of Polar Cases - Research Memorandum - Project Rand,

Personal Author(s):

Krieger, F J

Report Date:

01 Jul 1951

Media Count:

22 Page(s)

Report Number(s):

RM-646

XD-XD

Monitor Series:

XD

Report Classification:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116565

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) FORMULATING PRECISE CONCEPTS ON ORGANIZATION THEORY

Personal Author(s):

NEWELL,ALLEN

KRUSKAL,JOSEPH B

Report Date:

01 Jun 1951

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116563

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON THE FORMULATION OF THE STUDY OF LOGISTICS

Personal Author(s):

MORGENSTERN,OSKAR

Report Date:

28 May 1951

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116564

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) WHAT IS A SENSITIVITY ANALYSIS

Personal Author(s):

BECKENBACH,E F

JOHNSON,S M

Report Date:

09 May 1951

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0106400

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INSTANTANEOUS DAYLIGHT POSITION DETERMINATION BY CELESTIAL PHOTOGRAPHY

Personal Author(s):

THOMPSON,J S

Report Date:

May 1951

Media Count:

1 Page(s)

Report Number(s):

RM-609

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0330314

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) INQUIRY INTO THE FEASIBILITY OF WEATHER RECONNAISSANCE FROM A SATELLITE VEHICLE /U/

Report Date:

30 Apr 1951

Media Count:

1 Page(s)

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224689

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Statistical Study of Air-to-Ground Rocketry at the USAF 1950 Fighter Gunnery Meet,

Report Date:

09 Apr 1951

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0109332

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CONCEPTS AND APPLICATIONS OF RELIABILITY

Personal Author(s):

CARHART, R R

Report Date:

01 Mar 1951

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB182949

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Supersonic Flow Around Comes at Large Taw.

Personal Author(s):

Yound, G B

Siska, C P

Report Date:

01 Mar 1951

Media Count:

32 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

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12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB801317

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A Study of Project Scoop Linear Programming - and Appendixes 1 - 11,

Personal Author(s):

SHAPHARD, R W

Baldwin, W W

Report Date:

01 Mar 1951

Media Count:

141 Page(s)

Report Number(s):

R-210

XC-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224780

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MATRIX MULTIPLICATION USING STANDARD IBM EQUIPMENT.

Personal Author(s):

Hall,Jean

Report Date:

27 Feb 1951

Media Count:

4 Page(s)

Report Number(s):

RM596

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0085416

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOME BOUNDS TO POTENTIAL WINDOW COUNTERMEASURES EFFICIENCY

Personal Author(s):

HULT, JOHN L

Report Date:

Jan 1951

Media Count:

31 Page(s)

Report Number(s):

RM-521

Contract Number:

AF33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224242

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Economic War Potential of the USSR,

Personal Author(s):

Kershaw, Joseph A

Report Date:

06 Dec 1950

Media Count:

12 Page(s)

Report Number(s):

P-182

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224243

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) An Experimental Study of Ambiguity and Context,

Report Date:

30 Nov 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311478

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET MILITARY DEFECTION. A PRELIMINARY PROGRESS REPORT

Report Date:

30 Nov 1950

Media Count:

42 Page(s)

Report Number(s):

RAND/RM-489-1

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Distribution Statement:

Controlling DoD Organization: Deputy Chief of Staff Research and Development (Air Force), Attn: Project
Rand Office, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0108423

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) DERIVATION OF A WING WEIGHT FORMULA FOR A THIN WING STRUCTURE

Personal Author(s):

SHANLEY,F R

WECHSLER,J W

MICKS,W R

Report Date:

27 Nov 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116560

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SIMPLIFIED MODEL FOR SELECTING TYPES OF WARHEADS

Personal Author(s):

GIAMBONI,L A

Report Date:

20 Nov 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224779

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMMENTS ON THE MODIFIED FORM OF THE AIRCRAFT PROGRESS FUNCTION.

Personal Author(s):

Hoffman,S Fres

Report Date:

04 Oct 1950

Media Count:

15 Page(s)

Report Number(s):

RM464

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0102895

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A RADAR ANTI-JAMMING TECHNIQUE, WITH PARTICULAR APPLICATION TO BOMBSIGHTS

Personal Author(s):

MARCUM, J I

Report Date:

Oct 1950

Media Count:

1 Page(s)

Report Number(s):

RM-479

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0082109

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) NOISE ERRORS IN INERTIAL GUIDANCE SYSTEMS

Personal Author(s):

ISAACS, RUFUS

Report Date:

01 Oct 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311477

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) CERTAIN MULTI-GROUP EQUATIONS FOR CRITICAL REACTORS

Descriptive Note:

Research memo.

Personal Author(s):

Safonov, George

Report Date:

26 Sep 1950

Media Count:

69 Page(s)

Report Number(s):

RAND/RM-462

XC-AFRDC

Monitor Series:

AFRDC

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SECRET

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116557

Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) NORMALIZED CURVES OF A BOMBING CAMPAIGN
Personal Author(s):
MENGEL, A S
Report Date:
25 Sep 1950
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0116558
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) A SENSITIVITY ANALYSIS OF AN OFFENSIVE BOMBING SYSTEM
Personal Author(s):
Bellman, R
Bohnenblust, F
Report Date:
25 Sep 1950
Media Count:
18 Page(s)
Report Number(s):
RM-469
Contract Number:
AF 33(038)-6413
Report Classification:
Unclassified
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02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116556

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) METHODOLOGICAL PROBLEMS IN AIRFRAME COST-PERFORMANCE STUDIES

Personal Author(s):

ARROW,KENNETH J

ARROW,SELMA S

Report Date:

20 Sep 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311476

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AN EVALUATION OF RADIOLOGICAL WARFARE

Descriptive Note:

Research memo.

Personal Author(s):

Hill, Jerald E

Morris, Humbert

Report Date:

11 Sep 1950

Media Count:

24 Page(s)

Report Number(s):

RAND/RM-452

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; SEP 1950. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: Project Rand Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0103217

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

HULT, J L

Report Date:

Sep 1950

Media Count:

1 Page(s)

Report Number(s):

RM-467

Contract Number:

AF 33(038)-6413

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

09 - CLASSIFIED

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0140725

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) COMPARISON OF AIRPLANE SYSTEMS FOR STRATEGIC BOMBING. MULTIPLE-STRIKE STUDY

Personal Author(s):

QUADE,E S

SCHAMBERG,R

SPECHT,R D

Report Date:

Sep 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB800877

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Mechanical Properties of Ceramic Bodies,

Personal Author(s):

Duckworth, W H

Johnston, J K

Jackson, L R

Report Date:

31 Aug 1950

Media Count:

31 Page(s)

Report Number(s):

RAND/R-209

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

DISTRIBUTION AUTHORIZED TO DOD ONLY; ADMINISTRATIVE/OPERATIONAL USE; 24 FEB 1999. OTHER REQUESTS SHALL BE REFERRED THROUGH DEFENSE TECHNICAL INFORMATION CENTER, DTIC-BCS, 8725 JOHN J KINGMAN RD., FT. BELVOIR, VA 22060-6218

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0102293

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TABLES OF CONTRIBUTIONS TO THERMODYNAMIC PROPERTIES DUE TO GAS IMPERFECTION

Personal Author(s):

WHITE,W B

Report Date:

15 Aug 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0895041

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Chemical Kinetics and Rocket Nozzle Design,

Personal Author(s):

Krieger, F J

Report Date:

15 Aug 1950

Media Count:

31 Page(s)

Report Number(s):

R-203

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DDC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB183457

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Behavior of Commercial Hydrazine in Contact with Various Materials.

Descriptive Note:

Research rept.,

Personal Author(s):

Peterseim, F D
Clegg, J W
Report Date:
01 Aug 1950
Media Count:
23 Page(s)
Report Number(s):
RAND-RM-504
X0-X0
Monitor Series:
X0
Report Classification:
Unclassified
Distribution Limitation(s):
12 - U.S. GOVT. AND THEIR CONTRACTORS
Distribution Statement:
Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
ADB800878
Corporate Author:
RAND CORP SANTA MONICA CA
Unclassified Title:
(U) The Operational Code of the Politburo,
Personal Author(s):
Leites, Nathan
Report Date:
01 Aug 1950
Media Count:
100 Page(s)
Report Number(s):
RAND/R-206
XC-USAF
Monitor Series:
USAF
Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

DISTRIBUTION AUTHORIZED TO DOD ONLY; ADMINISTRATIVE/OPERATIONAL USE; 24 FEB 1999. OTHER REQUESTS SHALL BE REFERRED THROUGH DEFENSE TECHNICAL INFORMATION CENTER, DTIC-BCS, 8725 JOHN J KINGMAN RD., FT. BELVOIR, VA 22060-6218

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0603886

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE DEFINITION OF INFORMATION,

Personal Author(s):

Reich,Edgar

Report Date:

27 Jul 1950

Media Count:

10 Page(s)

Report Number(s):

P-167

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224241

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On the General Moment Problem,

Report Date:

07 Jul 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0111386

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) RAND RELIABILITY DATA SUMMARY

Personal Author(s):

HOWARD,W J

Report Date:

07 Jul 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0108424

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE EXPECTED COVERAGE OF A SMALL CIRCULAR TARGET BY A NUMBER OF CIRCULAR BOMBS

Personal Author(s):

DISHINGTON,R H

Report Date:

26 Jun 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116562

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE CAPACITY OF A RAILROAD FRIEGHT YARD (A SURVEY OF THE PROBLEM, NOT A SOLUTION)

Personal Author(s):

NEWELL,ALLEN

Report Date:

14 Jun 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0103216

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THERMODYNAMIC PROPERTIES OF REAL GASES FOR USE IN HIGH PRESSURE PROBLEMS

Personal Author(s):

KALLMANN, H K

Report Date:

15 May 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0415776

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LONG-RANGE SURFACE-TO-SURFACE ROCKET AND RAMJET MISSILES. FLIGHT ECONOMY,

Personal Author(s):

Davies,M E

Clement,G H

Report Date:

01 May 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224778

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON MANDELBAUMS STUDY OF THE INDUSTRIALIZATION OF BACKWARD AREAS.

Personal Author(s):

Arrow ,Kenneth J

Arrow,Selma S

Report Date:

25 Apr 1950

Media Count:

20 Page(s)

Report Number(s):

RM-373

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB217376

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/b217376.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Exploitation of Superstitions for Purposes of Psychological Warfare.

Descriptive Note:

Research memo.,

Personal Author(s):

Hungerford, Jean M

Report Date:

14 Apr 1950

Media Count:

36 Page(s)

Report Number(s):

RM-365

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: DTIC users only., Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311473

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) GENERALIZATION OF THE AGE EQUATIONS TO INCLUDE AN ARBITRARY FISSION SPECTRUM

Descriptive Note:

Research memo.

Personal Author(s):

Safonov, George

Report Date:

11 Apr 1950

Media Count:

18 Page(s)

Report Number(s):

RAND/RM-364

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1950. Other requests shall be referred to Deputy Chief of Staff Research and Development (Air Force), Attn: Project Rand Office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116553

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) LATERAL DYNAMIC CHARACTERISTICS OF A HIGH-SPEED SUBSONIC AIRPLANE

Personal Author(s):

ANSOFF,H I

Report Date:

17 Mar 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB801513

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Optimization of Warhead and Fusing Parameters - and Appendix 1,

Personal Author(s):

Dougherty, C B

Report Date:

10 Mar 1950

Media Count:

53 Page(s)

Report Number(s):

RM-349

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224786

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A METHOD OF EXTRAPOLATING BOMBER VULNERABILITY DATA TO GEOMETRICALLY SIMILAR BOMBERS.

Personal Author(s):

Gompf ,G E

Wilison,D P

Report Date:

06 Mar 1950

Media Count:

20 Page(s)

Report Number(s):

RM315

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116552

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) PRELIMINARY VULNERABILITY ESTIMATES FOR A FAMILY OF BOMBERS SUBJECT TO SURFACE-TO-AIR MISSILES

Personal Author(s):

DAVIS, D J

Report Date:

20 Feb 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311472

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) AGE THEORY APPLIED TO NUCLEAR REACTORS

Descriptive Note:

Research memo.

Personal Author(s):

Safonov, George

Report Date:

09 Feb 1950

Media Count:

57 Page(s)

Report Number(s):

RAND/RM-337

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112383

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) FIGHTER-BOMBER DUELS IN THE SYSTEMS ANALYSIS

Personal Author(s):

ANSOFF, H I

QUADE, E S

Report Date:

Feb 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB968593

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Circular Coverage Function.

Descriptive Note:

Research memorandum,

Personal Author(s):

Germond, H H

Report Date:

26 Jan 1950

Media Count:

21 Page(s)

Report Number(s):

Rand/RM-330

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB805046

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) The Circular Coverage Function.

Descriptive Note:

Research rept.,

Personal Author(s):

Germond, H H

Report Date:

26 Jan 1950

Media Count:

17 Page(s)

Report Number(s):

RAND-RM-330

XD-XD

Monitor Series:

XD

Report Classification:

Unclassified

Distribution Limitation(s):

04 - DOD ONLY; DOD CONTROLLED

Distribution Statement:

DISTRIBUTION AUTHORIZED TO DOD ONLY; ADMINISTRATIVE/OPERATIONAL USE; 03 MAR 1999. OTHER REQUESTS SHALL BE REFERRED THROUGH DEFENSE TECHNICAL INFORMATION CENTER, DTIC-BCS, 8725 JOHN J KINGMAN RD., FT. BELVOIR, VA 22060-6218

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311475

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BASIC DATA FOR TARGET ANALYSIS FOR RADIOLOGICAL WARFARE

Descriptive Note:

Research memo.

Personal Author(s):

Morris, H

Report Date:

18 Jan 1950

Media Count:

21 Page(s)

Report Number(s):

RAND/RM-385

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0114193

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTES ON (M X 2) EVALUATION MATRICES FOR SPECIAL SYSTEMS ANALYSIS APPLICATIONS

Personal Author(s):

WYLIE,JEAN

Report Date:

10 Jan 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0116551

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TABLE OF Q FUNCTIONS

Personal Author(s):

MARCUM,J I

Report Date:

01 Jan 1950

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311474

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) BASIC DATA FOR TARGET ANALYSIS FOR RADIOLOGICAL WARFARE

Personal Author(s):

Morris, H

Report Date:

21 Dec 1949

Media Count:

43 Page(s)

Report Number(s):

RM-384

XC-USAF

Monitor Series:

USAF

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

51 - RESTRICTED DATA

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 21 DEC 1949. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs office, Washington, DC 20330. Restricted Data.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224592

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A PRELIMINARY CONSIDERATION OF THE AIR SUPPLY PROBLEM,

Personal Author(s):

Young, B H

Report Date:

06 Dec 1949

Media Count:

14 Page(s)

Report Number(s):

RM-305

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224591

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Notes on the Range Capability of Future Chemically Fueled Airplanes.

Report Date:

06 Dec 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224590

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Numerical Scale for Partially Ordered Utilities,

Report Date:

05 Dec 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0204961

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE HAMILTONIAN GAME, (A TRAVELING SALESMEN PROBLEM)

Personal Author(s):

ROBINSON,JULIA

Report Date:

05 Dec 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112142

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MODEL FOF THE RELIABILITY OF COMPLEX MECHANISMS

Personal Author(s):

HARRIS,T E
Report Date:
05 Dec 1949
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224238
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Rational Approximation in High Speed Computing,
Report Date:
02 Dec 1949
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224777
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:

(U) Local Defense Versus Bombers,
Report Date:
28 Nov 1949
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0107352
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) AERODYNAMIC HEATING RELATIONS
Personal Author(s):
MOORE,L L
Report Date:
28 Nov 1949
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224589
Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Bomber Formations Analysis Preliminary Study,

Report Date:

28 Nov 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DDC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112394

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PURSUIT POSITIONING FACTORS: NON-MANEUVERING BOMBER

Personal Author(s):

LIND,J R

PHINIZY,W H

WILSON,J A

Report Date:

22 Nov 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224239

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Modification of the Monte Carlo Method,

Report Date:

14 Nov 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311401

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) THE WARNING OF TARGET POPULATIONS IN AIR WAR. AN APPENDIX OF WORKING PAPERS

Descriptive Note:

Research memo.

Report Date:

Nov 1949

Media Count:

272 Page(s)

Report Number(s):

RAND/RM-275

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

03 - U.S. GOVT. ONLY; DOD CONTROLLED

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; NOV 1949. Other requests shall be referred to Deputy Chief of Staff Research and Development, Director of Development Planning, Hq USAF, Attn: AFRDP, Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0491728

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/491728.pdf

Size: 228 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) A NOTE ON THE POWER FUNCTION OF THE WALD-WOLFOWITZ TOLERANCE LIMITS FOR A NORMAL DISTRIBUTION

Descriptive Note:

Research memo.

Personal Author(s):

Marshall, A W

Report Date:

21 Oct 1949

Media Count:

10 Page(s)

Report Number(s):

RM-271

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; OCT 1949. Other requests shall be referred to Deputy chief of Staff, Research and Development (Air Force), Washington, DC 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0137411

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EQUIVALENT VULNERABLE AREA OF MULTIPLE COMPONENTS

Personal Author(s):

MULHOLLAND,R P

Report Date:

18 Oct 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224585

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Games with Many Moves,

Report Date:

17 Oct 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224584

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ILLUSTRATIVE EXAMPLE OF APPLICATION OF KOOPMANS' TRANSPORTATION THEORY TO
SCHEDULING MILITARY TANKER FLEET,

Personal Author(s):

Flood,Merrill M

Report Date:

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Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SOVIET MILITARY INTELLIGENCE: COMMENTS ON THE BOOK, HANDBOOK FOR SPIES

Report Date:

12 Oct 1949

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224582

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Limitations of Focused Aperature Antennas,

Report Date:

10 Oct 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

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22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224580

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Strap: Summary of Economic Panel Discussion,

Report Date:

04 Oct 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224579

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Experimental Program,

Report Date:

03 Oct 1949

Media Count:

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Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224237

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Planning Defense Production,

Report Date:

29 Sep 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

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Citation Format: FOIA(UL)

Accession Number:

AD0224577

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On a Particular Non-Zero-Sum Game,

Report Date:

27 Sep 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224578

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Potentialities of the Photoelectric Coverage Machine,

Report Date:

27 Sep 1949

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Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0607581

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE POSSIBLE SPREAD OF RADIOACTIVE INFECTION BY THE FISSION PRODUCTS OF U235,

Personal Author(s):

Thirring,Hans

Report Date:

23 Sep 1949

Media Count:

24 Page(s)

Report Number(s):

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TT-64 71612

Monitor Series:

64 71612

Report Classification:

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Technical Reports Collection

Citation Format: FOIA(UL)

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AD0224575

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) General Study of Axial Flow Turbojet Engines.

Report Date:

15 Sep 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224573

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Comparison of Reconnaissances,

Report Date:

15 Sep 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

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Citation Format: FOIA(UL)

Accession Number:

AD0224571

Corporate Author:

RAND CORP SANTA MONICA CALIF

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Citation Format: FOIA(UL)

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AD0224568

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A MATHEMATICAL MODEL OF AN AIR TRANSPORTATION SYSTEM,

Personal Author(s):

Anderson,T W

Arrow,K J

Walsh,J E

Report Date:

26 Aug 1949

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Corporate Author:

RAND CORP SANTA MONICA CALIF

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Citation Format: FOIA(UL)

Accession Number:

AD0224348

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON FUNCTIONS OF RELATION, WITH ESPECIAL REFERENCE TO SOCIAL WELFARE,

Report Date:

19 Aug 1949

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Report Classification:

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Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0224345

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On Non-Zero-Sum Games and Stochastic Processes,

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Accession Number:

AD0224347

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Solutions of a Class of Continuous Games,

Report Date:

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RAND CORP SANTA MONICA CALIF

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AD0224346

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Duel with Time of Flight not Zero,

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Unclassified

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Citation Format: FOIA(UL)

Accession Number:

AD0112143

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SUCCESSIVE APPROXIMATION

Personal Author(s):

GERMOND,H H

Report Date:

15 Aug 1949

Media Count:

1 Page(s)

Report Classification:

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Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0224211

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Numerical Methods of Obtaining Solutions of Fixed End Point Problems in the Calculus of Variations,

Report Date:

14 Aug 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224581

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On the Thermodynamics of Solids. Critical Discussion of the Debye and Raman Theories with Applications,

Report Date:

12 Aug 1949

Media Count:

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Report Classification:

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Citation Format: FOIA(UL)

Accession Number:

AD0224340

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Commutative Boolean Functions,

Report Date:

10 Aug 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

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Citation Format: FOIA(UL)

Accession Number:

AD0224583

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Flat Bottom Root Thickness Effects on Missile Gross Weight and Range,

Report Date:

08 Aug 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0108319

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EXPECTED COVERAGE WITH CONVENTIONAL BOMBS WHEN RECTANGULAR PATTERNS ARE
EMPLOYED AGAINST RECTANGULAR TARGETS

Personal Author(s):

Germond, H H

Report Date:

05 Aug 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224342

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON THE SOLUTION OF CONVEX GAMES,

Report Date:

02 Aug 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):
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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224343

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Tactical Reconnaissance Model,

Report Date:

02 Aug 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Citation Format: FOIA(UL)

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AD0224341

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Size: 958 KB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Bomb Range as an Empirical Function of Velocity, Altitude and Ballistic Coefficient

Descriptive Note:

Working paper,

Personal Author(s):

White, W B

Report Date:

28 Jul 1949

Media Count:

29 Page(s)

Report Number(s):

RAND/RM-200

XC-USAF

Monitor Series:

USAF

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Unclassified

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224339

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Application of Theory of Games to Identification of Friend and Foe,

Report Date:

28 Jul 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224236

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Integral of the Gaussian Distribution over an Offset Ellipse,

Report Date:

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Media Count:

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Citation Format: FOIA(UL)

Accession Number:

AD0224338

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Theorem on Parametric Boolean Functions,

Report Date:

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Citation Format: FOIA(UL)

Accession Number:

AD0224337

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Problem in fourier Transforms Connected with the Design of an Antenna,

Report Date:

20 Jul 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112398

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) SIMPLIFIED PROBABILITY OF KILL FORMULAS FOR VULNERABILITY INVESTIGATIONS

Personal Author(s):

GOODPASTURE, R A

Report Date:

19 Jul 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0138107

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) NOTE ON SOME HISTORIC PRINCIPLES OF TARGET SELECTION

Personal Author(s):

KAYSEN,CARL

Report Date:

15 Jul 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224336

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) MECHANICAL INVERSION OF THE LAPLACE TRANSFORM,

Personal Author(s):

Widder,D

Report Date:

15 Jul 1949

Media Count:

22 Page(s)

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RM-187

Report Classification:

Unclassified

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Citation Format: FOIA(UL)

Accession Number:

AD0224335

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPARENT AMBIGUITY IN THE INTERPRETATION OF MINIMUM RISK,

Report Date:

13 Jul 1949

Media Count:

1 Page(s)

Report Classification:

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Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0109336

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A SLIDE RULE INEQUALITY

Personal Author(s):

GROSS,O

Report Date:

11 Jul 1949

Media Count:

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Report Classification:

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Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0224334

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) An Upper Limit to Cycle-Length in a Sequence of Digit Groups,

Report Date:

07 Jul 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

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Citation Format: FOIA(UL)

Accession Number:

AD0224198

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Report on Second Working Conference on Aircraft Vulnerability. Physical Data for Target Airplane Model G-4 Low Supersonic Interceptor,

Report Date:

30 Jun 1949

Media Count:

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Report Classification:

Unclassified

Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0224195

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Physical Data for Target Airplane Model G-1 High Subsonic Swept Wing Bomber,

Report Date:

30 Jun 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Citation Format: FOIA(UL)

Accession Number:

AD0224197

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Report on Second Working Conference on Aircraft Vulnerability. Physical Data for Target Airplane Model G-3 High Subsonic Interceptor.

Report Date:

30 Jun 1949

Media Count:

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Report Classification:

Unclassified

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Citation Format: FOIA(UL)

Accession Number:

AD0224196

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Physical Data for Target Airplane G-2 High Subsonic All-Wing Bomber,

Report Date:

30 Jun 1949

Media Count:

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Unclassified

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Citation Format: FOIA(UL)

Accession Number:

AD0108318

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON THE USEFULNESS OF ARTIFICIAL DISPERSION FOR A CERTAIN BOMBING PROBLEM

Personal Author(s):

WALSH,JOHN E

Report Date:

28 Jun 1949

Media Count:

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Report Classification:

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Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0109335

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) SOME NOTES ON THE SLIDE RULE PROBLEM

Personal Author(s):

GROSS,O

Report Date:

26 Jun 1949

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Accession Number:

AD0224332

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Survival Change with correlation in Aim,

Report Date:

24 Jun 1949

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Citation Format: FOIA(UL)

Accession Number:

AD0224333

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Bomb Requirements for Three Target Systems,

Report Date:

14 Jun 1949

Media Count:

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Unclassified

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Accession Number:

AD0224331

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ON A MINIMUM PROBLEM,

Report Date:

09 Jun 1949

Media Count:

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Citation Format: FOIA(UL)

Accession Number:

AD0108317

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AREA COVERAGE WITH ORDINARY BOMBS

Personal Author(s):

GERMOND,H H

Report Date:

01 Jun 1949

Media Count:

1 Page(s)

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Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Minimum Weight of Stiffened Cylindrical Shells in Pure Bending

Personal Author(s):

Micks, W R

Report Date:

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Media Count:

17 Page(s)

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RAND-P-89

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224329

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) AN EXAMPLE OF BLUFFING WITH PURE STRATEGIES,
Report Date:
18 May 1949
Media Count:
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Accession Number:
AD0224328
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) SOME ELEMENTARY INEQUALITIES,
Personal Author(s):
Bellman, Richard
Report Date:
10 May 1949
Media Count:
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AD0108315
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) EXPECTED OVERLAP
Personal Author(s):
GERMOND,H H
Report Date:
06 May 1949
Media Count:
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Accession Number:
AD0122258
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) ON THE TERRITORIAL COVERAGE OF SOVIET OFFICIAL STATISTICS FOR YEARS SINCE 1939
Personal Author(s):
BERGSON,ABRAM
HEYMANN,HANS
Report Date:
04 May 1949
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02 - U.S. GOVT. AND THEIR CONTRACTORS

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Citation Format: FOIA(UL)

Accession Number:

AD0224327

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CLASS OF GAMES WITH GOOD, PURE STRATEGIES,

Report Date:

02 May 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224326

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Empirical Analysis-Exponential Series,

Report Date:

02 May 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224325

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Some Comments on an Estimation Problem for Contaminated Populations,

Report Date:

28 Apr 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224330

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ARE THE COMINFORM COUNTRIES USING HYPNOTIC TECHNIQUES TO ELICIT CONFESSIONS IN
PUBLIC TRIALS,

Report Date:

25 Apr 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADC955496

Corporate Author:

RAND CORP SANTA MONICA CA

Personal Author(s):

Downs, E S

Anderson, R J

Lund, R J

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25 Apr 1949

Media Count:

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Report Classification:

CONFIDENTIAL

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224324

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Target Coverage,

Report Date:

20 Apr 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224218

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Three-Movie Game with Imperfect Communication,

Report Date:

15 Apr 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0108316

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN APPROXIMATE SOLUTION FOR A COVERAGE PROBLEM

Personal Author(s):

GERMOND,H H

Report Date:

11 Apr 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0110882

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) ESTIMATION OF MORTALITY PARAMETERS

Personal Author(s):

BROWN,GEORGE W

Report Date:

08 Apr 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224219

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Preliminary Considerations of Ramjet Trajectories,

Report Date:

01 Apr 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224272

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) AN ANALYTICAL APPROACH TO PERFORMANCE OF JET ENGINES EMPLOYING MCHANICAL
COMPRESSION,

Personal Author(s):

Salter,R M ,Jr

Report Date:

01 Apr 1949

Media Count:

16 Page(s)

Report Number(s):

RM-142

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224217

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Nosiy Duel, One Bullet Each, Arbitrary Non-Monotone Accuracy,

Report Date:

30 Mar 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0112397

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A NOTE ON VACUUM TUBE LIFE

Personal Author(s):

DAVIS,D J

Report Date:

28 Mar 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224216

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) An Integral Arising in Vulnerability Studies,

Personal Author(s):

Germond,H H

Report Date:

22 Mar 1949

Media Count:

6 Page(s)

Report Number(s):

RM123

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB956371

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Titanium and Titanium-Base Alloys.

Descriptive Note:

Technical rept.,

Personal Author(s):

Cross,H C

Westerman,A B

Report Date:

15 Mar 1949

Media Count:

172 Page(s)

Report Number(s):

RAND/R-131

Contract Number:

W33-038-ac-14105

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution limited to U.S. Gov't. agencies and their contractors; Critical Technology; 6 Jun 84. Other requests must be referred to AFWAL/GLIST, Wright-Patterson AFB, OH 45433.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224215

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Note on Optimal Decisions in Differential Equation Processes,

Report Date:

01 Mar 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224214

Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) An Asymptotic Distribution for a Mortality Problem,
Report Date:
28 Feb 1949
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0107270
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) GAS TURBINE CYCLE ANALYSIS BY MEANS OF ENTROPY CHANGES AND POLYTROPIC COMPONENT
EFFICIENCIES
Personal Author(s):
WOODWORTH,L R
Report Date:
15 Feb 1949
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB218245

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/b218245.pdf

Size: 1 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Research Planning: Memorandum for RAND Corporation, Crisis and Disaster Study,

Personal Author(s):

Grant, Wendell G

Report Date:

15 Feb 1949

Media Count:

19 Page(s)

Report Number(s):

RAND/RM-110

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224212

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) On the Number of Preference Arrangements of n Objects.

Report Date:
14 Feb 1949
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224210
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) A Hidden-Target Model,
Report Date:
14 Feb 1949
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0224213
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Construction of Group Preference Relations by Iteration,

Report Date:

12 Feb 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224209

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Note on a Functional Form for Polynomials,

Report Date:

01 Feb 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224208

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) HERMITE POLYNOMIALS OF IMAGINARY ARGUMENT,

Personal Author(s):

Germond,H H

Report Date:

01 Feb 1949

Media Count:

14 Page(s)

Report Number(s):

RM97

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0221675

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) THE THERMODYNAMIC PROPERTIES OF BORIC OXIDE AND OF ALUMINUM OXIDE IN THE IDEAL GASEOUS STATE

Personal Author(s):

KALLMANN,H K

KRIEGER,F J

Report Date:

01 Feb 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224207

Full Text (pdf) Availability:

View Full Text (pdf)

File: /UL/224207.pdf

Size: 5 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Number of Effective Fragments as a Measure of Potential Warhead Value

Descriptive Note:

Research memo.

Report Date:

27 Jan 1949

Media Count:

49 Page(s)

Report Number(s):

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 27 Jan 1949. Other requests shall be referred to Department of the Air Force, Attn: Public Affairs Office, Washington, DC, 20330.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224206

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:
(U) Forecast of Production Time,
Report Date:
20 Jan 1949
Media Count:
1 Page(s)
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:
AD0128335
Corporate Author:
RAND CORP SANTA MONICA CALIF
Unclassified Title:
(U) Forecast of Production Time.
Descriptive Note:
Research memo.,
Personal Author(s):
Germond,H H
Report Date:
20 Jan 1949
Media Count:
7 Page(s)
Report Number(s):
RAND/RM-92
Contract Number:
AF 33(038)-6513
Report Classification:
Unclassified
Distribution Limitation(s):
02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224569

Corporate Author:

RAND CORP SANTA MONICA CALIF

Report Date:

19 Jan 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224205

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Selection of Information on Coverage,

Report Date:

10 Jan 1949

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB183544

Full Text (pdf) Availability:

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File: /UL/b183544.pdf

Size: 2 MB

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Brief Survey of Linearized Theory of Supersonic Flow About Bodies of Revolution

Descriptive Note:

Research memo.

Personal Author(s):

Kvaas, A

Report Date:

06 Jan 1949

Media Count:

50 Page(s)

Report Number(s):

RM-90

XC-AFRDC

Monitor Series:

AFRDC

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224204

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Note on the Sums of Powers of the Roots of a Polynomial.

Report Date:

31 Dec 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224235

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Tables of Hermite Polynomials and the Derivatives of the Error Function,

Report Date:

29 Dec 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224203

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Representation by Sums of Separable Functions in pi Dimensions,

Report Date:

27 Dec 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0311381

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) RADIOLOGICAL DOSAGE RECEIVED BY CREW AFTER RELEASE OF RW MUNITION FROM AIRCRAFT

Descriptive Note:

Research memo.

Personal Author(s):

Cohen, S T

Report Date:

27 Dec 1948

Media Count:

8 Page(s)

Report Number(s):

RM-84

XC-USAF

Monitor Series:

USAF

Report Classification:

SECRET

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

51 - RESTRICTED DATA

Distribution Statement:

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Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224576

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) PARTICLE HISTORIES FOR PLANE SLABS,

Personal Author(s):

Kahn,Herman

Report Date:

24 Dec 1948

Media Count:

19 Page(s)

Report Number(s):

RM-248

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224202

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Preliminary Analysis of Effective Polarization on Gamma Ray Transmission,

Report Date:

23 Dec 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224201

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Least Squares Approximations by Sums of Separable Functions,

Report Date:

07 Dec 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224200

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Differential Equation with Random Shocks,

Personal Author(s):

Harris,T E

Paxson,E W

Report Date:

03 Dec 1948

Media Count:

7 Page(s)

Report Number(s):

RM74

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224783

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) EVALUATION OF MATERIALS IN THE ELASTO-PLASTIC RANGE.

Personal Author(s):

Jackson ,L R

Schwoppe ,A D

Shober,F

Report Date:

Dec 1948

Media Count:

31 Page(s)

Report Number(s):

RM113

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224199

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A Method for the Evaluation of Ramjet Fuels,

Report Date:

01 Nov 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0109333

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) EXAMINATION OF SOME MODELS OF FAILURE OF EQUIPMENT DURING OPERATION

Personal Author(s):

DAVIS, D J

HOWARD, W J

Report Date:

26 Oct 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224194

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Representation by Sums of Separable Functions,

Report Date:

19 Oct 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224781

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) GAMES WITH CIRCULAR SYMMETRY.

Personal Author(s):

Savage,L J

Report Date:

27 Aug 1948

Media Count:

3 Page(s)

Report Number(s):

RM597

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224785

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A CIRCULAR PROBABILITY GRID.

Personal Author(s):

Germond,H H

Report Date:

24 Aug 1948

Media Count:

5 Page(s)

Report Number(s):

RM309

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0135227

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) TABLES OF INTEGRALS ASSOCIATED WITH THE ERROR FUNCTION OF A COMPLEX VARIABLE

Personal Author(s):

HASTINGS,C JR

MARCUM,J I

Report Date:

01 Aug 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224192

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) REMARKS ON REDUCTION AND AGGREGATION,

Personal Author(s):

Koopmans,T C

Report Date:

21 Jul 1948

Media Count:

7 Page(s)

Report Number(s):

RM47

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224193

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) An Elucidation of Stone's Solution for a Slightly Yawing Supersonic Cone,

Report Date:

20 Jul 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

22 - DOCUMENT ILLEGIBLE

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB182947

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) An Elucidation of Stone's Solution for a Slightly Yawing Supersonic Cone.

Personal Author(s):

Young, G B

Report Date:

20 Jul 1948

Media Count:

32 Page(s)

Report Number(s):

RM-48

XC-USAF

Monitor Series:

USAF

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

Distribution Statement:

Distribution: DTIC user's only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224190

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Aerodynamic of Spheres,

Report Date:

23 Jun 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224189

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Some Examples of Games with Continuous Pay-Off Functions,

Report Date:

04 Jun 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224188

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) A 'Semi-Poisson' Distribution,

Report Date:

26 May 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB963729

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Tests of the Randomness of Digits,

Personal Author(s):

Brown, Bernice

Report Date:

17 May 1948

Media Count:

17 Page(s)

Report Number(s):

RAND/RM-38

Report Classification:

Unclassified

Distribution Limitation(s):

12 - U.S. GOVT. AND THEIR CONTRACTORS

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Distribution: DTIC users only.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0128334

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) The Concept of Military Worth,

Personal Author(s):

Kaplan,A

Report Date:

07 May 1948

Media Count:

38 Page(s)

Report Number(s):

RAND/RM-37

Contract Number:

AF 33(038)-6413

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

ADB951485

Corporate Author:

RAND CORP SANTA MONICA CA

Unclassified Title:

(U) Number of Rounds Required and Destruction Probability, in Form of Tables and Graphs,

Personal Author(s):

Langner,Herbert

Report Date:

06 Apr 1948

Media Count:

65 Page(s)

Report Number(s):

RAND/T-11

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

23 - AVAILABILITY: DOCUMENT PARTIALLY ILLEGIBLE

Distribution Statement:

Distribution: DTIC users only. Availability: Document partially illegible.

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224775

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Two Theorems Concerning Solutions for Game with Continua of Strategies,

Report Date:

05 Mar 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224187

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Ville's Example of a Game without a Strategic Saddle-Point,

Report Date:

23 Feb 1948

Media Count:

1 Page(s)

Report Classification:

Unclassified

Distribution Limitation(s):

02 - U.S. GOVT. AND THEIR CONTRACTORS

Technical Reports Collection

Citation Format: FOIA(UL)

Accession Number:

AD0224191

Corporate Author:

RAND CORP SANTA MONICA CALIF

Unclassified Title:

(U) Systems of Linear Production Function (Cowles Commission Discussion Papers, Economics, Number 215),

Report Date:

10 Feb 1948

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Report Date:

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(U) Second Order Theory of Bomber Attrition,

Personal Author(s):

Snow ,R N
Harris,T E
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Personal Author(s):
JACKSON ,L R
SCHWOPE ,A D
SHOBER,F
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Personal Author(s):

CLEMENT, G

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Corporate Author:

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(U) R-7.2 Maximization of a Function PHI (X,Y),

Personal Author(s):

Hastings,C ,Jr

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RAND CORP SANTA MONICA CA
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(U) MONOGRAPH ON THE THEORY OF CHARACTERISTICS
Personal Author(s):
Guderley, G
Liebhold, K G
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(U) Medical and Biological Aspects of Nuclear Energy,

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(U) Maximizing Z Equals Z (X,Y) when Z is Known Exactly only for Certain Values of One or Both Independent Variables,

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Corporate Author:

RAND CORP SANTA MONICA CALIF

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(U) The Location of the Maximum of a Function of Two Independent Variables when the Dependent and Independent Variables are Measured without Error,

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04 Aug 1947

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Unclassified Title:

(U) AN EXPERIMENT IN ESTIMATION

Personal Author(s):

HELMER,O
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RAND CORP SANTA MONICA CALIF
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(U) RANDOMNESS
Personal Author(s):
HELMER,O
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(U) Thermodynamic Properties of Metals,

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(U) Army Force Structure in Two-MRC Campaign Studies.

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Personal Author(s):

Kassing, David

Howe, Robert

Stevens, Donald

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RAND CORP SANTA MONICA CALIF

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(U) RED STAR SERIES ON ATOMIC ENERGY. PT. V. THE THERMONUCLEAR REACTION WITH HYDROGEN,

Personal Author(s):

Arkipov,M

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(U) A TIME SERIES ANALYSIS OF INTERINDUSTRY DEMANDS

Personal Author(s):

ARROW,KENNETH J

HOFFENBERG,MARVIN

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RAND CORP SANTA MONICA CALIF

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(U) Occurrence of Improbable States in a Modified Ehrenfest Model. Part I,

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