Description of document:	**Chronological listing of Defense Technical Information Center (DTIC) events highlighting origins and milestones, 1982**
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DEFENSE TECHNICAL INFORMATION CENTER
A Field Activity of the Defense Logistics Agency
CAMERON STATION, ALEXANDRIA, VIRGINIA 22314

DTIC: ORIGINS AND MILESTONES

1926 -- A Technical News Service was started by two Air Corps Engineering employees at McCook Field in Dayton, Ohio, from which the DDC announcement and classification bulletin evolved.

1929 -- Technical News Service (TNS) was transferred to Wright Field where the publication remained until 1957, when the Armed Services Technical Information Agency (ASTIA) moved to Washington, D.C. TNS renamed Technical Data Digest in 1932.

1933 -- ZWB - Center for Scientific Information on Aeronautical Research established in Germany. Many reports collected by this center became part of what is now the DDC collection.

1941 -- June: Office of Scientific Research and Development (OSRD) was established. During World War II, OSRD produced some 33,000 documents. Significant reports are in DDC collection.

1945 -- May: Nearly 1,500 Air Force Technical Intelligence teams fanned out over Germany to search for scientific information.

June: Documents assembled at Pre-Screening Center at Hanau, Germany. By October, 1,750 tons of reports had been "liberated."

July: Air Documents Research Center JA-2 (Intelligence USAAF) was established at London with Colonel H. M. McCoy, USAAF, as Technical Information Director. Working with Army Air Force were the United States Navy and the British War Ministry.

December: Air Documents Division (ADD) of the Intelligence (T-2) Department of the Headquarters, Air Technical Service, AAF, at Wright Field, Dayton, Ohio, took over some 800,000 documents from the European operation. Captured Japanese scientific documents were added. The Navy Bureau of Aeronautics Liaison Office transferred to Wright Field at the same time. Colonel Albert A. Arnhym, USAAF, became chief.

1946 -- Office of Naval Research (ONR) established and took custody of Office of Scientific Research and Development Reports.

1947 -- January: ONR awarded a contract to the Library of Congress to catalog the Navy's collection of technical reports and STP -- the Science and Technology Project was started.

1947 -- Spring: Institute of Aeronautical Sciences awarded contract by ADD to establish Standard Aeronautical Index System (SAIS) with Leslie E. Neville, later first director of ASTIA, as project manager.

September: U.S. Air Force became separate military department. ADD took over the Navy Liaison Office and agreed to serve the Navy Bureau of Aeronautics.

November: Cataloging of 56,000 German documents and 3,000 Japanese documents completed by ADD. These are in the present DDC collection.

1948 -- 13 October: Central Air Documents Office (CADO) established by Air Force and Navy with Colonel Arnhym as director. CADO took over captured German and Japanese documents in addition to the quarter million Wright Field collection of technical reports dating back to World War I. Operational Order (AFR 20-10/CNO Letter, Serial 193P551) was dated 18 August 1949.

1949 -- June: ONR project became Navy Research Section (NRS) within the Science Division of the Reference Department at the Library of Congress.

June: Snow, Ice and Permafrost Research Establishment (SIPRE) created by ONR as one of the first defense operated scientific and technical information evaluation centers.

1950 -- January: The Secretary of the Army joined in agreement to operate CADO; Army officer assigned as Assistant Director.

December: CADO West Coast Office at Los Angeles established.

1951 -- 14 May: Secretary of Defense, George C. Marshall, established Armed Services Technical Information Agency (ASTIA) under policy direction of the Department of Defense Research and Development (R&D) Board and management control of the Secretary of the Air Force.

14 May: ASTIA Advisory Council appointed to assist Director in operation of the Agency.

6 July: Secretary of the Air Force delegated active management of ASTIA to Air Research and Development Command.

8 October: Mr. Leslie E. Neville, public relations director of Curtiss-Wright Corporation, became the Director of ASTIA.

1952 -- 1 January: CADO taken over by ASTIA and renamed the ASTIA Document Service Center. CADO document collection totaled 250,000 and its document requests from users for Fiscal Year 1951 totaled 40,000.

20 June: R&D Board endorsed policy that ASTIA provide such services as were feasible and desired to governmental agencies related to the Department of Defense, such as NASA and AEC.

November: ASTIA regional office established in New York City.

1953 -- Technical Information Pilot (TIP), published by the Navy Research Section
of the Library of Congress, combined with the Technical Data Digest (TDD),
to form the Title Announcement Bulletin.

8 January: Assistant Secretary of Defense (Comptroller) directed that
Departments of the Army, Navy, and Air Force participate equally in fi-
nancing ASTIA.

16 February: The tri-service regulation for the operation of ASTIA, AFR
205-43, AR 380-60, OPNAVINST 5510.17, promulgated.

6 May: Navy Research Section of Library of Congress, operated for Office
of Naval Research since 1947, with a collection of 150,000 documents,
taken over by ASTIA and renamed the ASTIA Reference Center.

1 July: Document requests for the year exceeded 100,000.

1954 -- 1 July: Joint funding of ASTIA discontinued; ASTIA funded by Air Research
and Development Command.

August: The Assistant Secretary of Defense (R&D) ASTIA Policy Council re-
placed the ASTIA Advisory Council.

1955 -- Colonel Franklin K. Fagan, USAF, former Inspector General, ARDC, assigned
as Commander.

1956 -- 4 June: ASTIA authorized to provide unclassified documents to NATO nations
by Change 1 of tri-service directive.

December: First electrostatic reproduction unit placed in operation at
ASTIA. Subsequently, seven machines working 24 hours a day were required
to meet the demand for hard copies of documents.

1957 -- 1 July: The San Francisco regional office opened.

21 August: Colonel Woodrow W. Dunlop, USAF, former Deputy Commander for
Support, Air Force Cambridge Research Center, became Commander and Direc-
tor of ASTIA.

1 September: Title Announcement Bulletin becomes the Technical Abstract
Bulletin (TAB).

1958 -- 3 February: ASTIA consolidated operations by moving eighty vanloads
of documents and equipment to Arlington Hall Station, Arlington, Virginia.

April: The ASTIA Operational Liaison Committee established with official
representatives of Army, Navy, and Air Force.

29 August: SEATO nations added to ASTIA's authorized foreign release
service.

1 September: The ASTIA Policy Council abolished and policy guidance was
directed to come from the office which later became known as the Office of
Director of Defense Research and Engineering.

1959 -- First color film, a 30-minute motion picture entitled, "ASTIA: the Armed
Services Technical Information Agency," released.

1960 -- 15 February: ASTIA placed release control on documents acquired since 1 March 1953 under control of an electronic data processing system.

1 May: ASTIA published its first machine-tailored vocabulary of scientific terminology--Thesaurus of ASTIA Descriptors.

1 June: Department of Defense authorized ASTIA to provide service to grantees and potential contractors of the military departments.

1 July: Document requests exceeded half a million.

16 December: Current ARDC Technical Efforts (CATE) Program, for quickly identifying and locating scientists and engineers working in technical fields of interest to Air Force, assigned to ASTIA for inclusion in its Research, Development, Test and Evaluation (RDT&E) management data project.

1961 -- 19 June: Colonel James O. Vann, USAF, became Commander of ASTIA.

1 July: ASTIA started providing the Office of Technical Services (OTS) of the Department of Commerce microfilm copies, for sale to the general public, of all the Department of Defense unclassified/unlimited release reports it received.

15 October: Reader-printers were obtained for ASTIA Technical Operations Divisions in New York, Dayton, San Francisco and Los Angeles, and Headquarters Reference Office.

16 October: Retrieval capabilities of RDT&E with all basic research programed into the computer were demonstrated.

1962 -- 15 March: First Interdepartmental Data Exchange Program (IDEP) reports on missile and rocket component reliability announced by ASTIA.

23 March: Installation of second solid state tape computer system completed.

April: The Task Force to the President's Special Assistant for Science and Technology presented its report on "Scientific and Technological Communication in the Government" (Crawford Report, AD-299 545).

May: Second ASTIA color film, "Today, the Research; Tomorrow, the Weapon System," released, depicting activities of the field services.

4 May: Tri-service Staff Representatives replaced Army, Navy, Air Force ASTIA Operational Liaison Committee.

18 May: Dr. Charles L. Bernier, former Editor of Chemical Abstracts, became Director of ASTIA, under Colonel James O. Vann, ASTIA Commander.

15 June: ASTIA began supplying microfilm of unclassified/unlimited release reports to twelve NSF-OTS Regional Technical Report Centers in Colorado, District of Columbia, Georgia, Illinois, Massachusetts, Missouri, New York, Pennsylvania, Texas, Washington, and two centers in California.

1962 -- 1 October: ASTIA Huntsville Technical Operations Division opened at the Army's Redstone Arsenal in Alabama.

18 December: Mr. Walter M.Carlson named Defense Director of Technical Information.

31 December: Department of Defense Directive 5100.36 established the DoD Scientific and Technical Information program.

1963 -- 10 January: The President's Science Advisory Committee published its report on "Science, Government and Information" (Weinberg Report).

22 January: Department of Defense Instruction 5129.43 established ASTIA as the DoD Documentation Center for Scientific and Technical Information.

19 March: DoD Instruction 5100.38 expanded ASTIA mission and reconstituted ASTIA as Defense Documentation Center for Scientific and Technical Information (DDC). ASTIA tri-Service staff became the DDC Liaison Representatives.

1 July: Requests for documents during Fiscal Year 1963 totaled more than a million.

8 July: DDC moved to Cameron Station, Alexandria, Virginia.

22 July: DDC authorized to lease computer that provides immediate access to 500,000,000 alpha-numeric characters on drums.

1 September: The DDC Boston Technical Operations Division became operational.

1 November: DDC became a field activity of the Defense Supply Agency under Lt Gen Andrew T. McNamara, USA. Dr. Robert B. Stegmaier, Jr., Staff Assistant to the Defense Director of Technical Information, became DDC Administrator.

15 December: A UNIVAC 1107 thin film memory computer with peripheral automated data equipment installed to replace the out-grown twin Solid State 90 Systems.

1964 -- 1 February: A referral program established concerning DoD RDT&E programs.

April: First issue of the DDC Digest published.

11 May: First supplement to DDC Thesaurus of Descriptors published, listing 800 new terms.

1 July: DDC numbering system revised to assign the 600,000 series to the Department of Commerce for unclassified/unlimited release documents.

1964 -- 15 July: Departments of Defense and Commerce agreement whereby Commerce's Office of Technical Services processes unclassified/unlimited reports for DDC, became effective with publication of Technical Abstract Bulletin 64-14.

15 July: Furnishing copies to NATO and other foreign nations of unclassified/unlimited DoD reports taken over by Department of Commerce.

1 November: Active acquisitions program initiated to locate scientific and technical reports which should have been submitted to the DDC collection.

1965 -- 1 January: First index supplement to DDC TAB published, containing corporate author-monitoring agency, personal author, subject and contract indexes.

19 February: Production of new catalog cards terminated as computer takes over printing out cataloging and abstract data.

1 March: DoD STINFO Handbook, prepared and maintained by DDC, distributed as combination training and reference tool.

29 March: The official charter of DDC, DoD Instruction 5100.38, revised to reflect changes in operation.

1 April: DDC TAB policy expanded to announce existence of any DoD-sponsored document of significance to Defense RDT&E community, including journal articles.

5 April: DDC assigned monitorship for Part II of the DoD study on how scientists and engineers use technical information.

15 April: Telephones in DDC Document and Referral Service equipped with automatic recording devices for round-the-clock service to users.

15 June: For first time, DDC's documents processed from receipt to announcement in average of 25 workdays or less.

6 July: DDC monitoring DoD study on mechanization possibilities for DoD Libraries.

1 August: Microfiche (sheet film) replaced microfilm (roll film) as basic microform for storing documents.

10 August: Bibliographic citations by AD number may be obtained by DDC users by Telex request and reply.

18 August: Data banks of contractor Cost Reduction Reports and Contractor Performance Evaluation were received by DDC; system manually operated.

1 September: DoD Instruction 5200.21 required DDC to establish and maintain a central authority file of all users of Defense technical information services.

1965 -- 13 September: Eighteen DoD Information Analysis Centers furnished current awareness data by computer printouts on twice-a-month basis.

1 October: Printing method for TAB changed from offset to Linofilm, a computerized photo-composition technique, for improved graphic quality and readability.

November: Third DDC film, a 17-minute color production entitled, "The Defense Documentation Center," released.

1 December: DDC purchased computer used previously on lease basis.

1966 -- 1 January: The Report Number Index added to DDC Technical Abstract Bulletin Index.

1 January: Conversion from DDC Division/Section method of subject categorization to the Field/Group structure of the COSATI Subject Category List completed.

1 January: DDC began making copies of journal articles, announced in TAB, available to registered users. Previously, the articles submitted in lieu of technical reports were announced but copies not provided.

17 January: DDC's mission extended to include primary distribution within the United States of technical reports of certain foreign countries.

April: Magnetic tapes containing the AD-600 000 series documents data supplied to NASA and Army Electronics Command as part of experiment to develop standard magnetic tape exchange.

4 April: DDC directed to establish development program directed at new or improved services and products within scope of Center's mission.

15 May: The DD Form 613 (RDT&E Project Card) Program terminated. Program replaced by Research & Technology Work Unit Data Bank.

June: Referral service for DDC users concerning DoD-sponsored sources of scientific and technical information became operational.

15 June: Revised Thesaurus of DDC Descriptors published as an interim vocabulary pending the publication of Department of Defense Thesaurus, under Project LEX, in 1968.

1 July: Computerized Terminal Data Input System replaced Synchrotape machine operations, providing Center more immediate and effective control of technical reports during processing and entering changes for updating files.

8 August: RDT&E Work Unit Data Bank was assigned first priority for DDC manpower skills and equipment.

8 August: Films of approximately 60,000 unclassified German and Japanese World War II technical reports transferred to the National Air and Space Museum of the Smithsonian Institution.

1966 -- <u>16 September:</u> Liaison activities and services to visitors discontinued at the Washington, New York, Boston, Dayton, and San Francisco Field Service Offices.

<u>5 October:</u> DDC received a revised Manpower Authorization Voucher increasing its FY 1967 year-end strength from 482 to 502.

<u>3 November:</u> DDC directed to assist Clearinghouse for Federal Scientific and Technical Information, Department of Commerce, in preparation of the COSATI Corporate Author List. Assistance in computer programing, computer time, and keystroking to continue until 1 July 1968.

<u>21 November:</u> DDC Field Service Offices at Washington, New York, Boston, Dayton, and San Francisco disestablished.

<u>13 December:</u> DDC assigned responsibility for maintaining DoD-wide Thesaurus of Engineering and Scientific Terms, being generated under Project LEX.

<u>19 December:</u> DDC assigned responsibility, within DoD, for activities relating to the development, coordination requirements, and recommendations pertaining to standard data elements and data codes to be used in the DoD Thesaurus of Engineering and Scientific Terms.

1967 -- <u>3 January:</u> Technical reports concerning the supersonic transport program of the Federal Aviation Agency added to DDC collection.

<u>16 January:</u> "Report Title Index" developed for internal use in identifying requests for documents and in checking for duplicate reports.

<u>16 January:</u> Cost reductions totalling $88,207 claimed through reclamation of computer tapes, renegotiation of ADP maintenance contracts, and discontinuance of certain punched card accounting machine features.

<u>30 January:</u> Program initiated to airmail copies of Technical Abstract Bulletin to user organizations west of the Mississippi.

<u>2 February:</u> Input of Interservice Data Exchange Program (IDEP) reports resumed after being temporarily discontinued in January 1966 due to requirement for changes in internal IDEP distribution system.

<u>13 February:</u> Magnetic tape exchange program established whereby NASA receives both unclassified and classified technical report information processed by DDC.

<u>20 February:</u> To improve feedback on DDC bibliography services, a program was initiated to include the search strategy with the bibliography.

<u>20 February:</u> Maintenance of the DoD STINFO Handbook by DDC discontinued.

<u>20 February:</u> Terminal Data Input System, installed at CFSTI, was tested successfully.

1967 -- 2 March: DDC assumed responsibility for maintaining inventory of on-going Federal R&D in information science and technology.

22 March: First DDC-NASA interagency bibliography, dealing with heli-copter rotors, delivered to NASA.

31 March: Subject indexing and descriptive cataloging of Contractor Performance Evaluation Reports completed with punched-card files and printouts.

11 April: NASA's initial work unit submission of 3,108 records received for incorporation into the R&T Work Unit Information System.

17 April: Initial submissions of non-DoD data received from COSATI, Office of Education, and National Bureau of Standards for use in Infor-mation Sciences Technology Data Bank.

24 April: The Terminal Data Input System for CFSTI input to the DDC computer became operational.

15 May: ODDR&E concurred in National Bureau of Standards request to es-tablish a Computer Sciences Technology Data Bank at DDC.

26 May: The one remaining DDC Field Service Office at Los Angeles, Cali-fornia, terminated customer operations.

29 May: First report from newly established Computer Sciences Technology Data Bank sent to National Bureau of Standards.

5 June: 1966 Technical Abstract Bulletins and TAB Indexes reproduced and made available on microfiche.

19 June: AFSC made initial submission of material for the newly estab-lished Technical Facilities Data Bank.

17 July: First computer-produced indexes for reports in Contractor Per-formance Evaluation (CPE) Data Bank forwarded to nine CPE centers within DoD.

1 September: Program initiated whereby availability of unclassified Defense reports without distribution limitations are announced exclusively in U.S. Government Research and Development Reports (USGRDR) published by Department of Commerce. Technical Abstract Bulletin made a Confidential publication for announcements of classified reports and reports having limitations on distribution. One subscription to USGRDR, with companion indexes, made available to each organization registered for DDC services.

5 September: National Library of Medicine became first organization to receive automatic distribution of documents. Microfiche copies of unclas-sified reports provided on a TAB-cycle basis.

4 October: Responsibility assigned to DDC for support of Project THEMIS, a DoD project for development of new academic centers of excellence in research and development.

1967 -- 31 October: Cost reduction totalling $5,200,000 claimed through increased productivity of documentation services.

6 December: DDC Digest innovated process by which paper on which the publication is printed is first addressed on a high-speed computer printer, with spacing programed for subsequent offset printing of the Digest textual material. Production time cut by two days.

11 December: DDC began providing Edgewood Arsenal computer tapes of unclassified/unlimited document citations on TAB-cycle basis, the information to be used in Army system of selective dissemination of technical information.

1968 -- 1 January: "Release Authority Index" added to TAB Index.

29 February: OSD approved DDC selection of UNIVAC 1108 computer system to satisfy need for additional computer capability.

26 February: DDC developed capability through tape distribution system to provide user organizations with magnetic tapes of report information in lieu of bibliographic printouts.

10 March: Microfiche copies of the Technical Abstract Bulletin and Annual Indexes for 1964, 1965 and 1966 made available to users.

29 March: DDC began providing support in form of special reports of meteorological and aeronomical work unit resumes to Interdepartmental Committees for Atmospheric Sciences and Applied Meteorological Research.

18 April: DDC directed to assume support of Interagency Materials Sciences Exchange (IMSE) as extension of services available from Work Unit Data Bank.

10 June: First test printing of TAB by Linotron method, using DDC data on magnetic tape.

17 June: Bibliography on "Information Sciences" released as first in series of technology transfer bibliographies to make more Defense technical information available for non-military use.

1 July: Service charge of $3 instituted for full-size copies of technical reports when microfiche copies are available. Clearinghouse for Federal Scientific and Technical Information designated as collection agent for this service charge.

1 July: Registered contractors and subcontractors granted access to certain designated data within R&T Work Unit Information System.

1 August: First Technical Abstract Bulletin printed by Linotron method.

26 August: Edgewood Arsenal employs AUTODIN system in first test of high speed electrical transmission of orders for technical reports.

1968 — 14 October: DDC completes primary distribution of the DoD Thesaurus of Engineering and Scientific Terms, AD-672 000.

28 October: Performance of UNIVAC 1108 computer using EXEC 1 Operating System determined satisfactory following a 30-day test period.

31 October: Responsibility to establish and maintain DoD Studies and Analyses Data Bank assigned to DDC.

NOTE: DDC cost reduction actions totalling $248,213 were approved during CY 1968.

1969 — 8 January: Publication of "Contractor Access Manual," which describes the services available to contractors from the Center's R&T Work Unit Information System.

13 January: Congressional Record contained description of DDC services available to members of Congress.

10 February: Special service instituted to provide Army Materiel Command with extensive bibliographies and work unit summaries for use in legal predeterminations concerning contractor limited rights prior to large Army contractual negotiations.

10 March: Evaluation initiated with recipients of automatic microfiche distribution concerning the acceptability and utility of positive microfiche as compared with negative microfiche.

7 April: "Over-the-Counter" service initiated to meet urgent report requests from DDC users; CFSTI coupons exchanged for such documents at DDC.

21 April: Program requirements governing Contractor Performance Evaluation Reports expanded to include R&D contracts in excess of $100,000. Previous lower limit was $2,000,000.

12 May: Training began for personnel at the Air Force Systems Command to operate the first remote terminal of the DDC On-Line Retrieval System. (Communications between terminal and DDC extablished 16 June.)

June: "Machine-Aided Indexing," AD-696 200, published.

8 June: UNIVAC 1107 Central Processor disconnected and prepared for shipment to Naval Weather Research Facility, Norfolk, Virginia.

30 June: Contract let for development of Automatic Microfiche Reproduction, Storage and Retrieval System.

1 July: Linotron process used to compose Technical Abstract Bulletin Indexes by Government Printing Office.

18 August: Equipment modifications give DDC capability to reproduce material directly from microfilm to microfiche.

1969 — 18 August: Camera modification permits simultaneous filming of document on roll film and sheet film.

8 September: Equipment developed to convert microfiche to roll film for Xerox Copyflo production, providing improved service to users without an increase in cost.

22 September: Defense Communications Agency began submitting summaries to the DDC R&T Work Unit Information System.

24 October: Office of Director of Defense Research and Engineering became sixth remote terminal to establish communications with DDC On-Line Retrieval System experiment. Two units are located at DDC, one each at DDR&E, Air Force Systems Command, Naval Ship Research and Development Laboratory, and National Security Agency.

29 December: DDC On-Line Retrieval System experiment, which provides immediate access to the R&T Work Unit Information System, was expanded to include access to the Center's technical report collection via the inverted files, i.e., personal author, corporate author, subject and contract number. Results are presented as a list of accession numbers.

1970 — 1 January: DDC purchased UNIVAC 1108 computer system used previously on lease basis. A $551,631 cost reduction claim for FY 1970, based on savings realized through purchase instead of rental, was approved.

15 January: Revised DSAM 4185.3, Registration for Scientific and Technical Information Services, required Defense organizations to indicate subject fields of interest in registering for classified service, annual recertification of government user organizations, and discontinuance of contractor self-certification for unclassified services.

26 January: DDC developed process utilizing transmitted light rather than reflected light to place titling information on microfiche.

29 January: The 100,000th unclassified and unlimited document added to collection under DDC-CFSTI (NTIS) agreement.

10 February: Contract let for design of low-cost microfiche storage and retrieval system.

26 February: First summaries representing studies and analysis data entered into R&T Work Unit Information System.

2 March: Naval Ship Research and Development Laboratory received first products produced using DDC's computer-output-microfilm equipment.

15 March: Administrative Terminal System deactivated upon operational implementation of Text Processing System (TPS).

6 April: 1969 TAB Indexes are first annual indexes printed by Linotron process.

1970 — **13 April:** DDC processing system revised to allow users to order either positive or negative microfiche.

16 April: Automatic Document Distribution and Automatic Magnetic Tape Distribution approved for operational implementation under Selective Documentation Services Program.

23 April: First input for Research and Development Program Planning Data Bank (DD 1634) processed.

1 May: Contract let to develop English language retrieval inquiry system.

11 May: National Bureau of Standards requested DDC to suspend all efforts concerning Computer Sciences and Technology Data Bank until further notice.

14 May: DDC authorized to prepare "Defense Research and Development of the 1960's," a data package on 16mm film covering descriptions of all reports announced during the decade.

15 May: "Microfiche Viewing Equipment," AD-701 600, published by DDC.

15 May: Procedures established to service requests for documents containing "Critical Nuclear Weapon Design Information."

24 June: Contract awarded 30 June 1969 to develop automatic microfiche reproduction, storage and retrieval system terminated because of state-of-the-art problems.

6 July: Procurement action completed to rent additional 65K core memory for UNIVAC 1108 computer.

7 July: Three U.S. Marine Corps enlisted personnel, stationed at Quantico, Virginia, assigned to Data Processing Division as trainees under the Veterans Readjustment Appointments Program.

10 August: DDC received final report for design of low-cost microfiche storage and retrieval system, "Microfiche Storage and Retrieval System: Final Report," AD-710 000.

19 August: Automatic Magnetic Tape Dissemination (AMTD) offered as operational service; enables users to receive TAB information on magnetic tape.

20 August: Initiation of planning for establishment of Independent Research and Development (IR&D) Data Bank at DDC.

14 September: Initial items for IR&D Data Bank received.

17 September: National Center for Health Services Research and Development, HEW, submitted initial input to WUIS. This is first non-DoD agency other than NASA to contribute.

1970 -- 16 October: Requirement for DoD components and contractors to submit 20 copies of technical reports changed to require 12 copies each of unclassified and unlimited reports and two copies each of classified or limited distribution reports.

1 November: Publication of technical report, AD-716 200, "The Future of Indexing and Retrieval Vocabularies."

5 November: Publication of AD-712 800, "Referral Data Bank Directory of the Defense Documentation Center." Publication contains descriptions of more than 180 scientific and technical information sources.

13 November: Completed full-scale, on-line test for automating the duplicate checking of incoming documents.

10 December: Announced availability of "Defense R&D of the 1960s" (citations and indexes for over 400,000 scientific and technical reports announced from 1960 through 1969 in support of DoD R&D efforts), a 16mm microfilm compendium produced via computer-output-microfilm equipment.

1971 -- 11 January: R&D Program Planning (DD 1634) Data Bank information made available to individuals within DoD having appropriate security clearance and need-to-know.

15 January: Remote terminal with peripheral equipment installed at Redstone Scientific Information Center, Huntsville, Alabama, as a link into DDC On-Line Retrieval System.

March: One copy of a DDC report, "16mm Microfilm Viewing Equipment Guide," AD-718 000, prepared by the Directorate of Development, was sent to every registered DDC user organization without charge. Two other Development reports, "Automatic Selective Documentation Services," AD-722 425, and "Machine-Aided Indexing--Technical Progress Report, July 1969-June 1970," AD-721 875, were also published.

1 April: TAB Indexes reclassified as Confidential publication.

15 April: Remote terminal at Air Force Weapons Laboratory, Kirtland AFB, New Mexico, became operational.

19 April: Approval received to extend on-line system to capacity of 32 terminals. Costs associated with additional installation of equipment and operation of terminals to be funded by terminal users.

23 April: Defense Supply Agency announced assumption of the management of nine contractor-operated DoD Information Analysis Centers, which are served by DDC on a continuing basis.

26 April: Dual filming units installed on four microfiche cameras enable cameras to reproduce material in both 35mm roll microfilm and microfiche simultaneously.

1971 -- <u>26 April</u>: DDC document collection now contains more than one million scientific and technical reports. Two-thirds of collection under computer control.

<u>30 April</u>: ODDR&E, Director of Technical Information, authorized DDC to release to Coast Guard documents which had been limited to DoD distribution only.

<u>14 May</u>: DTI/ODDR&E memorandum authorized announcing Critical Nuclear Weapon Design Information (CNWDI) in TAB. Requests require approval of controlling organization.

<u>17 May</u>: DDC users having National Technical Information Service (NTIS) deposit accounts authorized to send document requests directly to DDC rather than to NTIS. Change reduces processing time.

<u>24 May</u>: DDC hosted conference of representatives from 22 DoD Information Analysis Centers.

<u>24 May</u>: DDC announced a $0.95 charge effective 1 July 1971 for classified and limited-distribution documents on microform and that DDC could no longer accept into its collection reports marked "For Official Use Only."

<u>24 May</u>: First listing of Regional User Groups (45) announced. Subsequently, 21 other groups were announced.

<u>1 June</u>: DDC discontinued service from Contractor Cost Reduction Data Bank.

<u>4 June</u>: Remote terminal at U.S. Army Chief for Research and Development Information Systems Office, Arlington, Virginia, became operational.

<u>7 June</u>: UNISCOPE Model 300 CRT remote terminals were replaced by UNISCOPE Model 100 CRT units at stations of the DDC on-line system. Faster data handling at lesser cost resulted in savings of $19,760 for FY 1971 and $117,680 through FY 1973.

<u>21 June</u>: DDC authorized to purchase an additional 65K core memory for use with UNIVAC 1108 computer.

<u>1 July</u>: Experimental development phase of Automatic Document Distribution (ADD) Program completed. Program became operational. A service charge of $0.35 instituted for each microfiche report provided through ADD program.

<u>6 July</u>: Agreement reached under which DDC provides use of its UNIVAC 1108 computer by the Defense Fuel Support Center for evaluating aviation fuels bids.

<u>16 July</u>: The fiftieth issue of DDC Digest published. New services announced included the availability of four DDC products on magnetic tape (retrospective bibliographies, compendiums of the 1960s and 1970s, and automatic magnetic tape dissemination) and 16mm copies of "Defense R&D of 1970," comprising complete citations and indexes to all documents announced by DDC during 1970.

1971 — **August:** Source Hierarchy List, DDCH 4185.6, prepared indicating full hierarchical relationships of DDC contributors in the management information and technical report data files.

2 August: Software of DDC UNIVAC 1108 computer operations for technical report processing was provided to the Department of Transportation (DOT), making possible the elimination of duplicate programing effort and resulting in significant cost savings for DOT.

9 August: An automated Selective Dissemination of Information (SDI) program developed by U.S. Army Electronics Command was successfully tested and converted by DDC for use by DDC subscribers who obtain magnetic tape products from this Center. An SDI reference manual, DDCM 4185.6, was completed in August and a comprehensive systems reference manual for the SDI program, DSAM 4185.10, was published in October.

31 August: ODDR&E Technical Evaluation Group requested DDC to assure operational status of the Independent Research and Development (IR&D) Data Bank by 14 March 1972.

7 September: On-Line cathode ray tube installation became operational at the Naval Weapons Center, China Lake, California, with direct long-line communications with DDC's computer data bank.

13 September: NASA, NTIS, and DDC agreed to implement National Microfilm Association 24:1 standard microfiche reduction ratio, changing from present 20:1 ratio by the Spring of 1972. Announcement made to DDC users in 10 November 1971 DDC Digest. A surplus microfiche camera was obtained in December from another agency for conversion to 24:1 reduction ratio.

1 October: DDC hosted a Tri-Service meeting and presented its proposal for a "DoD RDT&E On-Line System," involving the extension of the cathode ray tube system several times its present size.

12 October: Unclassified collection of approximately 7,000 catalog cards prepared before 1958 by the Snow, Ice, and Permafrost Research Establishment Project of the Army Corps of Engineers was scheduled for transfer to the National Archives by DDC.

18 October: Processing of unclassified and limited documents, which has been performed by the National Technical Information Service for DDC, transferred back to DDC.

18 October: Modifications to provide dual channels for UNIVAC FASTRAND II mass-storage subsystem installed, increasing data throughput processing capacity significantly. System accepted on 10 November 1971.

20 October: Meeting held at DDC with representatives of the military services, Studies Analyses and Gaming Agency, DSAH-S, and ODDR&E (DTI) to discuss input of studies and analyses information into the WUIS.

28 October: In-house printing, binding, and distribution of the Technical Abstract Bulletin (TAB) was completed less than six work days after receipt of offset negatives from the Government Printing Office.

1971 -- <u>November</u>: DoD approval was given for an additional million dollars for DDC's use this Fiscal Year, primarily for expansion of the automatic data processing system to include more remote terminals.

<u>1 November</u>: Hierarchy linkages established for computer retrieval of data cataloged under all source names used by DDC, greatly reducing retrieval time for both on-line and batch-processing systems.

<u>1 November</u>: Work Unit Information System (WUIS) files expanded to include additional data elements unique to the needs of the Army and Navy. Number of users of WUIS Report System rose from 65 as of October 1969 to 121, with 265 reports issued annually as of October 1969 and 706 as of 1 November 1971.

<u>22 November</u>: Improved Text Processing System (TPS) implemented, reducing manpower and computer time requirements and providing recovery by ranges of items, rather than retrieval by individual entries.

<u>22 November</u>: DDC scheduled bibliographies reached the "best-seller" level with an average order rate of 52 for each title announced during January-September 1971, compared with an average of 15 for technical reports.

<u>26 November</u>: Automatic Document Distribution (ADD) program participation doubled in the five months it has been in operation, with 72 organizations currently participating.

<u>26 November</u>: Major aerospace company became first to place order for magnetic tape version of "Defense R&D of the 1960's" at a cost of $2,050.

<u>29 November</u>: An urgent request from ODDR&E for a Work Unit bibliography on infectious diseases was filled within 15 minutes. This service exemplifies the type of quick search by on-line cathode ray tube that DDC performed on several other occasions over the past twelve months.

<u>December</u>: Bibliography searches were performed throughout the year for several high-level offices and agencies including: two U.S. Senators, the Secretary of the Interior, the House Appropriations Committee, the National Science Foundation (for a study being made for the President's Science Advisor), the Department of State, the Committee on Scientific and Technical Information Panel on Management Information, the Director of Technical Information (ODDR&E), the Studies, Analyses and Gaming Agency of the Joint Chiefs of Staff, and the Argentine Government (via the Assistant Secretary of Defense for International Security Affairs). In addition to these specialized, "tailor-made" bibliographies, DDC prepared several major scheduled bibliographies, including a series on pollution, involving searches in subject areas concerning the atmosphere, noise, soil, water, and radiation.

<u>15 December</u>: DDC terminated the production of positive microfiche, due to a low level of interest, and will furnish only negative fiche to users.

1971 — 20 December: Three thousand documents that have been reviewed for declassification and release to the public have been sent to the National Technical Information Service (NTIS), under provisions of DoD Directive 5200.20, dated 24 September 1970.

20 December: On-Line System extension initiated, on a priority request basis, to include cathode ray tube terminals for the Joint Chiefs of Staff, the Army Chief of Research and Development, and the Navy Material Command. Authorization of an additional one million dollars received, as part of expansion of the On-Line System.

1972 — January: Requested acquisition of direct mass storage equipment from Hqs DSA to GSA for approval.

Conversion of DDC-produced magnetic tape for input to GPO linotron photocomposition system to be performed by DSASC instead of GPO, at no cost to DDC.

All major Navy laboratories briefed on DDC's On-Line System and given review of feasibility of direct laboratory-to-DDC input of DD 1498 data.

Remote terminal at Air Force Avionics Laboratory, Wright-Patterson Air Force Base, Dayton, Ohio, became operational.

First large-scale system test of the Independent Research and Development (IR&D) input program completed with creation of Direct and Inverted files from 1,448 IR&D project records received from 21 participating companies. Almost all input records were free of machine-detectable errors.

Software package developed to enable users receiving DDC data files on magnetic tape to conduct their own searches. New program entitled, "Selective Dissemination of Information (SDI)."

February: DDC tested a computer subsystem consisting of ten computer programs for the Defense Fuel Supply Senter (DFSC) Bid Evaluation System. (Subsystem was designed and programmed in American National Standards Institute (ANSI) COBOL to provide DFSC added flexibility of operating the system on either the DDC UNIVAC 1108 or the Support Center IBM 370.)

March: On-Line remote terminal installed at the Navy Material Command, Crystal City Plaza, Arlington, Va.

Average processing time for announcing technical reports reduced from 45 calendar days at the beginning of FY 72 to 41 calendar days, due to transfer of TAB printing from GPO to in-house operation.

1972 -- **April:** Discontinued subsidizing distribution on Department of Commerce National Technical Information System journals to DDC users.

Began participation in American National Standards Institute Technical Committee X3K5 (Vocabulary for Information Processing.)

DDR&E and Advanced Technology requested a definitive plan for installation and utilization of remote terminals over the next five years. Request stated use of remote terminals to search DDC's data bases had reached operational status.

May: The new motion picture which reflects current programs and services offered by DDC was approved.

A core memory (65,000 36-bit words), four fast access drums and a communication terminal module controller were received from China Lake.

Information from the Independent Research and Development (IR&D) data bank made available for use within Department of Defense.

June: DDC began processing all documents announced in TAB. Since 1968, NTIS has processed the unclassified/limited document workload.

DDC published technical report entitled "Natural Language Data Base," AD 743 600, the first progress report on the development of this data base, covering the period Jan 69 - Mar 72. Report emphasizes the creation of an initial model from data generated by the Machine-Aided Indexing.

Remote terminal at Department of the Army, Office of Chief, Research and Development, became operational on 9 June.

Plan for expanding the Defense RDT&E On-Line System was submitted to Hqs DSA.

Hqs Air Force Systems Command authorized DDC to extend their services to over 400 users currently registered under the Air Force Technical Objectives Document Program to 31 Dec 72.

1972 -- <u>July</u>: Additional bank of core memory, acquired through excess
ADPE program from Naval Weapons Center, China Lake, California,
was installed. Installation was part of ADPE modification
planned for expansion of on-line system.

Beginning 1 July, TAB Indexes were printed at DDC.
In-house printing gave better control of classified information
as well as improved processing and distributing schedules.

<u>August</u>: Machine-Aided Indexing techniques used to index FY 72
Air Force Program Planning (1634) Data Bank records. Efforts
to index FY 73 Navy projects and tasks initiated.

Microfiche-to-hard copy equipment, capable of
producing hard copy from microfiche in either a 20 or 24:1
reduction format installed. This was first production machine
of this kind to be installed in the United States.

Remote terminal at U.S. Army Electronics Command,
Ft. Monmouth, New Jersey, became operational on 28 August.

<u>September</u>: Mr. Hubert E. Sauter assumed duties as Deputy
Administrator, DDC, on 18 Sep 72. Mr. Sauter was formerly
with the National Technical Information Service, Department
of Commerce.

<u>October</u>: Contract awarded for purchase of direct access
storage equipment to support DoD RDT&E On-Line System.

TAB and TAB Indexes for 15 Oct 72 were first of
the publications to be bound on DDC's new Sulby wrap-around
covering machine. Equipment enables Center to provide run
down back strips (or spines) on its publications.

<u>November</u>: DDC recently increased its multi-batch processing.
Initially, an average of four jobs were processed in a multi-
batch mode on the UNIVAC 1107, which was installed in 1964.
An analysis shows that this average has now increased to
eight jobs at any one time on the UNIVAC 1108 system.

A simulation was conducted wherein 45 on-line
terminals were accepted into the system and the various
retrieval functions were performed along with TPS terminals.
This was significant in that each terminal is considered a
batch job.

DDC began providing periodic searches of R&D
Program Planning Data Bank on automatic basis.

1972 -- <u>December</u>: Agreement under which DDC provided programming
          support for the Defense Fuels Supply Center (DFSC) to
          automate Bid Evaluation Reports terminated.

               System improvements on Defense RDT&E On-Line
          System provide notification to on-line users of system
          availability, status, changes, and various other items
          concerning remote terminal operations and services.
          Information displays appear when remote terminals are
          first activated each day and can be accessed by the user
          at any time during daily operations.

1973 -- <u>January</u>: DDC forwarded for publication the Military
          Standard 847A, "Standard Formats for Technical Reports."

               Installed additional Communication Terminal
          Module Control Unit to support additional 17 users.

               DDC's Cal Comp 1144 Disk Storage Subsystem
          installed. Equipment doubled DDC's mass storage capacity
          and supported expansion of Defense RDT&E On-Line System.

               Two Xerox MEP (Microfiche-to-hard copy printer/
          enlargers) installed. Each machine capable of producing
          2,000 pages per hour.

               First unclassified remote terminals in Defense
          RDT&E On-Line System activated for training and final tests
          at Metals and Ceramics Information Center (MCIC), Battelle
          Memorial Institute, Columbus, Ohio.

          <u>February</u>: Systems analysis and programming changes,
          necessitated by the provisions of DoD 5200.IR, Information
          Security Program Regulation, implemented in ADP production
          programs. Further efforts started for file update and
          security marking of hard copy and microfiche to reflect
          new downgrading/classification requirements.

               Bruning microfiche duplicating machine, capable
          of reproducing, cutting, and sorting 10 microfiche per minute,
          installed for use with DDC's Automatic Document Distribution
          Program.

          <u>March</u>: DDC contract awarded Analysis and Programming Corporation
          to determine best communication configuration to support DDC
          system. Contractor to determine feasibility of using Defense
          Communications System network and other alternatives to the
          telephone company leased lines.

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1973 -- <u>March</u>: Remote CRT terminal at Naval Research Laboratory (NRL), Washington, DC, became operational. This is the sixteenth remote terminal.

Representatives from Naval Research Laboratory visited DDC to discuss decentralization and direct input from individual Navy Laboratories to DDC.

More than 217,500 technical reports added to document collection in last five fiscal years. During this period, percentage of unclassified/unlimited reports increased from 38% in FY 58 54% in FY 72.

<u>May</u>: Contract awarded to UNIVAC Corporation for purchase of two high-speed printers. New printer subsystem to provide DDC with improved computer printout capabilities.

Initial shipment of 100 DoD-owned patents received from Office of the Army Judge Advocate General. The patents, part of the program to announce government-owned patents available for licensing, to be processed and announced by NTIS.

DDC implemented modified retrieval programs for searching Work Unit Information System, Research and Development data banks. Searches of these data banks had been run separately on the computer. By combining retrieval programs, 75 percent of the programs previously required were eliminated, resulting in saving almost an hour per night of computer time.

<u>June</u>: Procedures for processing limited documents revised. Users requesting limited documents instructed to submit requests directly to DDC for processing to the releasing agencies.

Additional technical report cataloging data and abstracts for unclassified/limited reports will be displayed to terminal users who previously did not have access to these records.

Dr. Robert B. Stegmaier, Jr., Administrator of DDC since 1 Nov 63, retired from Federal Service. Mr. Hubert E. Sauter designated Acting Administrator.

<u>July</u>: Contract awarded to purchase additional 88 million word direct access mass storage equipment to support DDC's computer system and the Defense RDT&E On-Line Network.

1973 -- _July:_ Contract awarded for purchase of Uninterruptible
Power Supply (UPS) system to provide emergency electrical
power for up to 15 minutes duration, enabling DDC to
continue operating during momentary power fluctuations.

Two remote terminals to on-line system became
operational, one at the Naval Ordnance Laboratory (NOL),
White Oak, Maryland, and one for Army at the Redstone
Scientific Information Center (RSIC), Huntsville, AL.

Remote terminal at Naval Air Development Center,
Warminster, Pennsylvania, became operational on 26 Jul 73.

Remote terminal located at Naval Underwater Systems
Center, Newport, Rhode Island, became operational 10 Sep 73.

Remote terminal located at the Defense Systems
Management School (DSMS), Fort Belvoir, VA, became
operational on 14 Sep 73. Terminal was first to operate
with ordinary telephone dial-up capability.

October: Remote terminal at the Naval Coastal Systems
Laboratory, Panama City, Florida, became operational on
28 Sep 73.

Xerox Model 3600-MEP microfiche-to-hard copy
printer/enlarger installed.

Remote terminal at Naval Civil Engineering Laboratory,
Port Hueneme, California, was installed on 10 Oct 73.

Two UNIVAC 758 High Speed Printers installed to improve
processing time for output products.

Remote terminal at the Studies, Analysis, and Gaming
Agency, Washington, DC, became operational on 18 Oct 73.

November: Remote terminal at the Naval Postgraduate School,
Monterey, California, became operational on 9 Nov 73.

DDC hosted a meeting attended by representatives from
most Government agencies producing microforms to discuss the
aging and storing of microforms. Attention focused on technical
aspects of film deterioration and lack of standards for storage
of nonsilver film. A recommended plan of action initiated.

December: Mr. Hubert E. Sauter appointed Administrator of DDC.

December: Procurement action initiated for acquisition of
open literature data banks to provide laboratories with direct
on-line access to indexes of scientific and technical journals.
First DoD laboratories expected to link into these data bases
by December 1973.

1973 -- <u>December</u>: Experimentation with use of the Remote
         Terminal Input Subsystem of the Defense RDT&E On-Line
         System to input R&T Work Unit Information System data
         was extended to 5 Dec 73 to include input from a terminal
         outside of DDC. The NAVMAT terminal, located at Crystal
         City, will begin field testing of the RTIS and will
         demonstrate the RTIS to interested Navy laboratories.

              Defense RDT&E On-Line Training Center at DDC
         became operational on 10 Dec 73. Center will be focus
         of centralized training for all aspects of on-line system.

              Remote terminal at Air Mobility Command, Fort
         Eustis, VA, became operational on 12 Dec 73.

1974 -- <u>January</u>: Remote terminal at Natick Laboratory, Boston,
         Massachusetts, became operational on 4 Jan 74.

              DDC Retrieval and Indexing Terminology (DRIT)
         vocabulary implemented to index and retrieve R&T Work
         Unit Information. Under this system, computer "reads"
         document and assigns descriptors based on author's own
         language.

              File of approximately 70,000 PANDEX-supplied open
         literature citations records available for access by in-house
         terminals and the remote terminal at the Naval Air Develop-
         ment Center (NADC). After reviewing this file, journal literature
         procedures, and updating the remaining tapes supplied by
         NADC, access to the open literature file will be opened to
         the remaining six sites designated by the Services.

<u>February</u>: Remote terminal at Army Waterways Experiment
Station, Vicksburg, Mississippi, became operational on 26 Jan 74.

              Distribution of DoD Dissemination Authority List (DAL)
         changed from monthly to bimonthly.

              Capability to input Work Unit Information System data
         via DDC Remote Terminal Input Subsystem (RTIS) extended to
         terminal at Naval Ship R&D Center.

              DDC completed preliminary automated security testing
         of its computer programs.

<u>March</u>: Remote terminals at Naval Undersea Center, San Diego,
California, and Army Aviation Systems Command, St. Louis,
Missouri, became operational on 1 Mar 74 and 6 Mar 74,
respectively.

1974 -- <u>March</u>: As a result of negotiations with UNIVAC, DDC
will realize a cost reduction savings of approximately
$299,000 in connection with acquisition of a second
UNIVAC 1108 and peripheral equipment.

The Unitized Channel Storage acquired from the
Navy Undersea Research and Development Center, Pasadena,
California, delivered. Additional equipment (UNIVAC 1108)
from the DoD Electromagnetic Compatibility Analysis Center
in Annapolis, Maryland, being prepared for shipment with
installation expected to be completed shortly.

MIL-STD 847-A, Format Requirements for Scientific
and Technical Reports Prepared by or for the Department of
Defense, was modified in accordance with correspondence from
Congressman W. L. Hays, Ohio, Chairman of the Congressional
Joint Committee on Printing. Authors' names on covers of
technical reports were discontinued, except under certain
conditions.

<u>April</u>: Due to nationwide paper shortage, DDC implemented
policy of providing citations in technical report biblio-
graphies for only the last 10 years, and only one copy of
ADP output products unless written justification furnished,
to save over a million sheets of ADP paper annually.

Remote terminal at the Air Force Business Research
Management Center, Wright-Patterson AFB, Ohio, became
operational on 1 Apr 74.

Authorization for access to DDC products and services
expired for users registered under the Air Force Potential
Contractor Program (Air Force Technical Objectives Document
release program - TOD). There were 172 users registered
under program at time of expiration.

The Air Force has advised DDC that new registration
packages have been provided users previously registered
under the TOD program. The major change in the new
Potential Contractor Program is that the Army, Navy, and
Air Force will recognize potential contractors registered
under each other's programs.

The Naval Telecommunications Command has requested the
Defense Communications Agency to install multiplex service
to four west coast Naval on-line sites. The four sites will
share a common communication channel from DDC to San Diego,
California. Operation is scheduled for 1 Jul 74.

1974 -- **April:** Remote terminal at Foreign Science Technology Center (FSTC), Charlottesville, VA, became operational on 2 Apr 74.

Remote terminals at Naval Electronic Systems Center, Arlington, VA, and Nondestructive Testing Data Support Center, San Antonio, Texas, became operational on 22 and 23 Apr 74, respectively.

May: Termination message broadcast capability implemented to inform on-line system users of imminent or planned termination of system operations. Message includes actual time of termination and is displayed on all activated terminals.

June: DDC hosted over 70 members of an Information Hang-Ups group on 4 Jun 74. Ongoing development experiments and the need for user participation in the preparation of a DDC Ten-Year Plan were discussed. The group volunteered to assist DDC in the identification and documentation of scientific and technical requirements for 1976-1986.

Requests for 40,869 limited technical reports were processed in the first 10 months of FY 74, an increase of 19 percent over the same period last year. This increase resulted from change in policy initiated in June 1973. Ninety-one percent of the requests returned by the controlling agencies were approved for release.

July: The remote terminal at the Army Armament Command, Rock Island, Illinois, became operational on 25 Jun 74.

The remote terminals located at the Naval Underwater Systems Center, New London, Connecticut, and Aberdeen Proving Ground, Aberdeen, Maryland, became operational on 5 Jul and 9 Jul 74, respectively.

The remote terminal at Picatinny Arsenal, Dover, New Jersey, became operational on 11 Jul 74.

The Second Annual Users Conference was held on 23-26 Jul 74. The 96 participants included representatives from current, planned, and potential system users. The conference highlighted technical improvements to the system, and provided a forum for user feedback on benefits, problems, and future needs.

The first multiplex circuit associated with the Defense RDT&E On-Line System became operational on 18 Jul 74. The four operating locations that were converted from direct line operation to multiplex operation are the Naval Postgraduate School, Monterey, California; Naval Weapons Center, China Lake, California; Naval Undersea Center, San Diego, California; and Naval Electronics Laboratory Center, San Diego, California.

1974 -- <u>August</u>: The Nondestructive Testing Data Center entered 161 new technical report citations pertinent to nondestructive testing via the Remote Terminal Input Subsystem. This represents the first major input of citation data from an IAC as well as the first significant use of the Remote Terminal Input Subsystem.

The remote terminal at the Frankford Arsenal, Philadelphia, Pennsylvania, became operational on 8 Aug 74.

Consolidated DDC/DSASC printing plant operations will be accomplished by 26 Aug 74. The merger results in more effective utilization of personnel and equipment, and reduction of physical space requirements.

On-line access to the PANDEX Journal Literature Data Base was made available to 11 additional remote sites on 13 Aug 74, bringing the total to 18 remote sites receiving this information. This is the maximum number of remote terminals authorized access to this data base under the agreement with Macmillan Information, Inc.

DDC has begun necessary action to install secure terminals at the following locations in according with Hqs DSA approval to proceed with installation and testing of DCASR and contractor utilization of the system:
    DCASR Los Angeles; DCASR Boston;
    Hughes Aircraft, Culver City, California;
    Boeing Company, Seattle, Washington.

The 2,631 organizations registered for DDC products and services as of 31 Jul 74 represent a new low in the recent history of the Center. To reverse this trend, the Center has requested and received approval to establish an Office of User Liaison, a function of which will be to develop and implement programs for marketing and promoting DDC products and services.

<u>September</u>: DDC batch processed 691 bibliographies for the remote on-line terminal during the month of August 74. This represents a new monthly high for this type of workload.

The redesigned on-line system has successfully completed phase 2 of the implementation test and is currently operating on a daily 3-hour basis at 28 selected terminal sites. This achievement utilizes significant technological improvements developed since initial implementation of the on-line system, and provides the capability to achieve the goal of extending the system to 128 terminals.

1974 -- **September:** Remote terminal located at Central Intelligence
Agency, McLean, Virginia, became operational on 16 Sep 74.

Six additional magnetic tape units were installed
as scheduled during the weekend of 14-15 Sep 74. This
additional equipment is utilized to improve batch system
operations.

DDC has successfully completed the computer processing
against the Natural Language Data Bank and forwarded both the
magnetic tapes and necessary worksheets to GPO for LINOTRON
processing for the second publication of the DRIT and Hierarchy.
A Dec 74 publication date is planned.

Automatic distribution of approximately 34,200
microfiche copies of technical reports in Sep 74 will be 18 per-
cent above program. This is an increase of 18 percent over the
same month last year due primarily to reports distributed in
support of the Selective Dissemination of Information Expanded
Program.

October: Remote terminal located at the Command and General
Staff College, Fort Leavenworth, Kansas, became operational
on 26 Sep 74.

A group of top level DDC staff members, who will
establish a closer relationship between DDC and its users
through more frequent visits to actual and potential user
organizations, completed an intensive training course in
effective briefing and conference leadership.

DDC has provided potential Defense RDT&E On-Line
System users with a draft manual that provides guidelines
for the procurement, installation, and operation of CRT
terminals. Use of this manual will eliminate the requirement
for DDC communications and systems personnel to travel to the
user organization to assist in the on-site implementation of
remote terminals.

November: Remote terminals located at the Army Materiel and
Mechanics Research Center, Watertown, Massachusetts; Rome
Air Development Center, Rome, New York; and the National
Aeronautics and Space Administration, Washington, DC,
became operational on 26 Oct 74 and 30 Oct 74. Activation
was accomplished using the Guidelines for Installation and
Implementation of Remote Terminals without the presence of
DDC communications or systems personnel. There are now 49
CRT terminals within the Defense RDT&E On-Line System.

1974 -- <u>December:</u> <u>DoD Reprints</u> - DDC began processing DoD reprints that were formerly accomplished by NTIS. This results in a $64,000 reduction in the Memorandum of Understanding with NTIS.

<u>Expanded Accession Numbering System</u> - Beginning in January 75, accession numbers will expand to include a leading alpha character, which will accommodate 15 million new reports.

<u>NASA/DDC Terminal Exchange</u> - NASA and DDC exchanged terminals each providing the other with access to respective data bases, to evaluate the concept of computer-to-computer network.

<u>Independent Research & Development</u> - DoD officials met with the Administrator and representatives of Services including DoD program managers for IR&D. Plans and schedules for creation of an IR&D data base were provided.

<u>Natural Language Data Base (NLDB) Effectiveness</u> - Indexing terms extracted by the Machine-Aided Indexing routines from the text of the NASA FY 75 submission of R&T Operating Plans matched NLDB terms at 62.1 percent, compared to a 46.8 matching rate for the NASA FY 74 submissions.

The 796 R&T Operating Plans from NASA have been processed into the Work Unit Information System, with data available both through the batch system and the on-line terminals.

<u>Administrator Appointed to AGARD Panel</u> - Mr. Hubert E. Sauter, Administrator of DDC, was appointed a U.S. member of the Technical Information Panel of the Advisory Group of Aerospace Research and Development (AGARD) representing the Department of Defense. This appointment is effective 22 Nov 74-30 Sep 77.

1975 -- <u>January:</u> <u>Activation of Remote Terminals</u> - Terminals located at the Air Force Armament Test Lab, Eglin AFB, Florida and the Army Library, Pentagon, became operational on 18 Dec 74 and 27 Dec 74 respectively. There are now 51 CRT terminals operating within the Defense RDT&E On-Line System.

<u>Extension of On-Line Capability</u> - On request of Chief of Naval Material, Naval Material Command, additional Navy terminals were extended the capability to transmit file maintenance transactions via the Remote Terminal Input Subsystem. All 15 Navy terminals now have this capability. This brings the total number to 17 of terminals that are using the DROLS System for input.

<u>First Edition DRIT</u> - The First Edition of the DDC Retrieval and Indexing Terminology (DRIT) is being distributed. The two-volume DRIT contains an alphabetical listing of posting terms taken from the Natural Language Data Base and a hierarchical index in which each generic term is displayed with the more specific terms listed below it, according to respective levels of specificity. The preliminary edition was published in early 74. One set is offered to each registered user without charge.

1975 -- January: <u>User Guide</u> - DDC has experienced tremendous interest from user organizations to the new publication entitled "User's Guide to DDC Programs, Products and Services." Initial distribution was 2900 copies with requests for additional copies totaling 1,342.

In-House Terminals - Five additional CRT terminals became operational at DDC on 23 Jan. Use of these terminals by DDC analysts will improve the quality and turnaround time for output products. There are now 55 CRT terminals operating within DROLS.

Southeast Coast Regional User Conference - DDC representatives conducted a conference at the Naval Coastal System Lab, Panama City, FL, on 16-17 Jan for southeast regional users. Attendees were enthusiastic about re-entrant software system and discussed requirements for increased system utilization.

February: NASA Access to IR&D Data Bank - NASA Hqs has been registered with a special user code to permit access to the IR&D data bank. This is the only non-DoD organization with such access authorized by Dr. Malcolm R. Currie, DDR&E.

Deactivation of Remote Terminal - The unclassified remote terminal located at Redstone Scientific Information Center (RSIC), Huntsville, Alabama, was deactivated on 4 Feb. This terminal was installed for the sole purpose of accessing open literature. RSIC will continue to operate a classified remote terminal. There are currently 54 CRT terminals operating within DROLS.

Activation of Remote Terminal - The remote terminal at the Harry Diamond Lab, Woodbridge, VA, became operational on 12 Feb. There are now 55 CRT terminals operating within the Defense RDT&E On-Line (DROLS).

1975 -- March: Activation of Remote Terminals - The terminals at the Plastics Technical Evaluation Center, Picatinny, Arsenal, NJ, and the Air Force Flight Dynamics Lab, Wright-Patterson, Ohio, became operational on 25 Feb and 26 Feb respectively. There are now 57 CRT terminals operating within DROLS.

The remote terminal at the Harry Diamond Lab at Adelphi, MD, became operational on 26 Mar. There are now 58 terminals operating within DROLS.

Sonar Technology - Naval personnel visited DDC to discuss their requirement for use of the DROLS capability to input, store, and retrieve sonar technology by Navy scientific personnel. Secure features of the system permit Navy control of the use of this information and provide specific information to those interested in this subject.

April: Unitized Channel Storage - DDC exercised the Government's option in purchasing the Unitized Channel Storage Subsystem from UNIVAC as a net cost of $662,567. Through negotiations, the Government was able to obtain a 22 percent discount.

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1975 -- **April: Activation of Remote Terminal** - The remote terminal at Lawrence Livermore Lab, Livermore, CA, became operational on 10 Apr. There are now 59 CRT terminals operating within DROLS.

ADPE Contingency Backup Support - The U.S. Army Military Personnel Center (MILPERCEN) Alexandria, VA and DDC have agreed to make available contingency backup computer support in the event of emergency situations. The agreement becomes effective 1 Sep 75.

May: ADPE Expansion - An RFP for additional ADPE has been released by DSAH-PPP. This equipment will provide additional support for the DROLS and other increased mission workloads through FY 76-77. The additional equipment should be installed by 25 Aug 75.

Technical Reports at a Discount - When NTIS increased charges for demand microfiche, DDC negotiated an arrangement with them to save users of DDC 60¢ per document. Consequently, DDC users saved $16,000 during the period 1 Nov 74 - 30 Apr 75.

Communications Expansion - The Southern Communications Area of the Air Force Engineering and Installation Agency has been formally assigned to the DDC Communications Improvement Project. Personnel from this activity are to perform the formal site survey in June. This will support DDC efforts to expand its crypto facilities and to install patch and test equipment to identify trouble spots in the DROLS.

Installation of Remote Terminal at AMC - The Army Materiel Command (AMC) is in the process of installing an updated CRT terminal at their Alex., VA, Hqs to provide them with access to the DDC data banks. The AMC CRT terminal currently located at DDC has been deactivated. There are now 58 terminals operating within DROLS.

June: DRIT Survey - DDC inquired of its user organizations their preferences concerning alternative formats for technical vocabulary information. Users indicated their preference for the present format of the DDC Retrieval and Indexing Terminology (DRIT). A total of 40 remote on-line sites and 70 other users indicated the present format should not be changed.

On-Line Service Facility - An orientation and training program has been developed for the temporary managers of the DDC On-Line service facilities to be located at DCASRs, LA and Boston. The program includes selected on-the-job training briefings in the areas of marketing and liaison, on-line and industrial security, administrative support services, and an overview of DDC products, services and registration procedures.

DDC User Requirements and Planning Study - The contract for this study was awarded to the Auerbach Corp., Philadelphia, on 19 Jun. Auerbach submitted the low bid of $206,368 among eight responses to the RFP.

1976 -- Qctober: <u>Unclassified Dial-Up Experiment Completed</u> - DDC, in
conjunction with six local unclassified on-line system users,
successfully completed a one-month production dial-up experiment.
Results of the experiment will be evaluated.

<u>Keypunch Contract Eliminated</u> - The Natural Language Data Base (NLDB)
input program has been modified to accept data via the Text Processing
System. Implementation of this new capability will allow DDC to elim-
inate the contractual keypunch support previously needed to accomplish
this workload.

<u>Liaison Group Expanded</u> - The Defense Communications Agency, Defense
Nuclear Agency, and Defense Advanced Research Projects Agency have
become active participants in the Military Services--DDC Represent-
atives Group. The group meets quarterly at DDC to review inter-
Departmental information transfer programs and problems of common
interest.

<u>Defense RDT&E On-Line Systems Enhanced</u> - DDC has been granted a
waiver which will allow communication lines connecting unclassified
and classified terminals to be terminated in the same Communication
Terminal Module Controller. This will allow increased utilization
of existing equipment and result in a cost savings of approximately
$10,000 over the next 12 months.

November: <u>Freedom of Information Act (FOIA) Request</u> - Based on
guidance from ODASD (Security Policy) and ODDR&E, TAB Indexes 74-14,
5 Jul 74, was declassified on 19 Oct 76 and provided to
Mr. William G. Florence. A previous request for a copy of TAB
Indexes 74-15, 19 Jul 74, culminated in an order from the U.S.
District Court for the District of Columbia requiring DDC to make
each unclassified entry contained in the Indexes available to
Mr. Florence. DDC has submitted alternative formats for future
issues of TAB and TAB Indexes to DSA and DoD.

<u>Remote Terminal Activated</u> - The remote terminal located at Grumman
Aerospace, Bethpage, NY, became operational as a classified terminal
on 27 Oct. There are currently 75 CRT terminals operational within
DROLS.

<u>Terminal Conversion</u> - The remote terminal located at the Massachusetts
Institute of Technology, Lincoln Lab, Lexington, MA, was converted
to a classified terminal and became operational pm 27 Oct.

1976 -- November: <u>IAC Data Bank Status</u> - The Metals and Ceramics Information
Center (MCIC) data bank currently contains nearly 23,000 records. Of
these, over 13,000 (57 percent) are accessible only by MCIC. The
Nondestructive Testing Information Analysis Center (NTIAC) Data Bank
contains over 11,000 records, of which over 9,000 (82 percent) are
available only to NTIAC. The Plastics Technical Evaluation Center
(PLASTEC) data bank contains over 10,000 records. PLASTEC has
exclusive access to 7,000 (70 percent) of these records.

1976 — November: Status of Employees Affected by Position Classification Survey as of 31 Oct 76 - There were no new placements in October. This is attributed to a general slowdown in personnel activity during this period. There were 138 employees affected; 4 grades sustained on rereview, thus, 134 employees to be placed. The number placed through Oct was 52 with 9 declining placement resulting in a balance of 73 employees to be placed.

On-Line System Improved - DDC has completed several enhancements to DROLS in support of established "Director's Goals." These enhancements result in a significant decrease in system response time, the display of unclassified titles for technical reports over 10 years old, source hierarchy search capability for the technical reports collection, immediate processing of priority requests, and an improved display of search statistics at unclassified terminals.

Current Awareness Bibliographies Increase - The CAB Program automatically provides bibliographies of newly accessioned technical reports based on a participant's interest profile. This service is less costly to DDC than providing searches on an individual request basis. Intensified interest and publicity about the program have increased the number of participating user organizations to 118, representing 714 interest profiles. This compares to 69 organizations and 485 profiles a year ago—an increase of 71 and 47 percent respectively.

Terminals Activated - Five in-house DROLS terminals became operational on 23 Nov to facilitate improved services for all users. This increases the total number of terminals to 80, of which 17 are in-house.

December: Canadian R&D Data Available - Approximately 200 Canadian Work Unit summaries are now available from the R&T WUIS. This represents the initial Canadian input under a program whereby the U.S. and Canada will exchange unclassified and unlimited work unit data on a semiannual basis. Data are releasable to Defense organizations of each country.

On-Line System Enhancement - DROLS users have been provided the capability to display unannounced technical reports. This capability parallels services previously available only in the batch mode.

ADPE Cost Avoidance Acquisition - Three magnetic tape units were acquired through ADPE Excess Program for use with the UNIVAC 418 printer subsystem. This acquisition represents an annual savings of approximately $10,000.

R&D Program Planning Data Bank - Approximately 1,300 Air Force FY 77 Project and Task level summaries were added to the data bank in December and are available for retrieval. This represents more than a 200 percent increase over last years's Air Force input. Nearly all the increase is due to the greatest number of task level summaries submitted—73 in FY 76 versus 993 in FY 77. This completes the processing of all program planning data for FY 77.

1977 -- October: **US/Canada Work Unit Exchange** - Approximately 525 Canadian unclassified/unlimited work unit summaries were submitted for processing into the WUIS data bank. These data represent work units for FY 77 in the US/Canadian exchange of R&D project data.

Remote Terminals Activated - Fort McPherson Library System, Ft McPherson, GA, became operational as the 87th terminal. U.S. Army Research Office, Triangle Park, NC, and Naval Surface Weapons Center, Dahlgren, VA became operational as unclassified sites on 12 Oct. There are now 89 terminals.

November: Reappointment to AGARD Panel - The Administrator was reappointed to membership on the AGARD Technical Information Panel effective Oct 77-30 Dec 80.

Remote Terminal Activated - Air University Library, Maxwell AFB, Alabama became operational as unclassified site on 2 Nov. This makes total number of terminal sites 90.

Mobile Sonar Technology (MOST) Data Bank - All reports received on Project MOST (from Naval Undersea Center) have been reviewed. About 1,000 reports have been added to DDC data bank with 600 being held in suspense pending receipt of information regarding selection requirements.

Blanket Release of Limited Documents - A new release block has been added to DDC Form 55, Request for Limited Documents. The new block can be checked by document sources to provide blanket authority to release documents to DDC registered users. This helps to eliminate requirements to request individual releases.

December: Remote Terminal Activated - IIT Research Institute of the Illinois Institute of Technology, Chicago, became operational as an unclassified site on 16 Dec. This organization is the contractor for GACIAC. The system now totals 91 sites.

Procurement Authority - GSA has granted DDC the authority to competitively acquire a computer system to replace currently installed UNIVAC 1108 system at DDC.

Microfiche Printer Test - A Bruning Model 1830, Microfiche Enlarger Printer has been installed for a three-month trial. The machine can run 48X, 24X, or 20:1 reduction and will be tested as a supplement to the Xerox 970 Microfiche Printing System currently in use.

1978 -- January: **Soil Mechanics Information Analysis Center Input** - SMIAC has 113 Unique bibliographic citations in the Technical Report data bank. Unlike other IAC records, these citations are available for viewing to on-line users.

1978 -- Shared Bibliographic Input Experiment (SBIE) Continues - The final operational step for processing the first group of technical reports received under SBIE has been accomplished. Under this experiment, about 35 reports per week are being entered into the technical report data bank. This is accomplished by converting temporarily assigned report control numbers to permanent numbers. This volume of input is expected to continue throughout the duration of the experiment.

Remote Terminal Activated - Plastics Technical Evaluation Center (PLASTEC), Picatinny Arsenal, NJ, became operational on 19 Jan as an unclassified site. (This marks the 92nd terminal.)

Implementation of Upper/Lower Case Bibliographic Products on Xerox 1200 - DDC has capabilities now to provide upper/lower case printed bibliographic products through the use of Xerox 1200 equipment. These capabilities also provide for integration of various bibliographic parts into a single package thereby eliminating manual assembly prior to shipment to the mail room. A cost savings in shipping costs should result in regard to reduction of size and weight of packages.

February: Increase in Computer Throughput Efficiency - During Aug-Dec 77, representatives of the Federal Computer Performance Evaluation and Simulation Center (FEDSIM) conducted computer hardware monitor measurements to determine if the response time could be improved in accessing the UNIVAC 1108 high-speed drums. A change in the interlace factor, from 2 to 1, could accomplish such an improvement. Thus, the change was made and DDC is experiencing an increased efficiency on computer systems.

DROLS Terminal Activated - The terminal at the Institute for Defense Analyses (IDA) became operational on 14 Feb as an unclassified site. This is the 93rd terminal linked to DROLS.

AGARD Manual - At the request of the Advisory Group for Aerospace R&D (AGARD/NATO), DDC prepared a manual on descriptive cataloging for inclusion in a 12-volume documentation practices manual.

March: Approval to Acquire Interim Computer System - On 7 March, a delegation of procurement authority was granted for the sole source acquisition of a UNIVAC 1100/82 system on an interim basis. The interim system will replace one of the currently installed 1108 systems.

DROLS Terminal Conversion - The terminal at NASA was converted from a dedicated to a dial-up mode on 9 March.

New On-line System Capability - DDC is offering "Part Unit Sharing" services to DROLS users. This service links two or more terminals to one DDC communications port. This will result in cost savings to users and the government.

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1978 -- <u>April</u>: <u>Operating System Upgrade</u> - Authority was granted by DLA Command Security to upgrade the DDC UNIVAC 1100 operating system. This upgrade will permit the Center to utilize enhanced system capabilities available with new releases and provide an orderly transition between current and impending interim computer systems.

<u>Service to DoD Contractors Improved</u> - On 3 April, DDC began furnishing unclassified/unlimited technical reports to registered contractor organizations. This distribution was previously performed by NTIS. This change will promote economy within DoD through more efficient service and cost savings to contractors.

<u>May</u>: <u>Approval to Publish Unclassified TAB</u> - Beginning Jul 78, DDC will issue the Technical Abstract Bulletin (TAB) and TAB Indexes as unclassified rather than confidential publications. Broader availability and ease of handling to increase usefulness are anticipated.

<u>AGARD Appointment</u> - Mr. Hubert E. Sauter, DDC Administrator, has been appointed U.S. Coordinator for the AGARD Technical Information Panel. He has served as DoD representative on the panel for the last four years.

<u>June</u>: <u>Impact of Returned Unclassified/Unlimited Contractor Requests from NTIS</u> - DDC began processing the U^2 contractor requests on 3 Apr. An average increase of 240 requests daily has been experienced since processing began. Turnaround time for such requests remains unchanged with increased work load absorbed by current personnel.

<u>On-Line Update System for work Unit Data Bank</u> - A system for on-line updating of work unit records was presented by the Army Materiel Development and Readiness Command (DARCOM). Under this system, Army laboratories connected to DDC's on-line system have on-line access to a computer at ADRSI for processing or updating work units. ADRSI, in turn, will edit the data and transmit to DDC. Unclassified data input has begun. Future plans call for processing classified data and on-line input from ADRSI to DDC.

<u>Demand for TAB and TAB Indexes Increases</u> - Increases in numbers of users and copies of TABs ordered have been noted with the issuance of these products as unclassified publications. The increase in users totals 35 percent, and copies requested amounts to 30 percent. TAB was a classified (confidential) publication from 1 Sept 67 issue before the recent declassification.

<u>July</u>: <u>Interim Upgrade of ADPE</u> - From 8-14 Jul, one UNIVAC 1108 computer system was removed from the DDC computer facility, and installation started on a UNIVAC 1100/82 large-scale computer system. Additional air conditioning and supporting electrical requirements for the new computer system have been satisfied. On 10 Jul, DDC initiated a "one UNIVAC 1108 computer" schedule which involved partitioning time for DROLS, Text Processing System, and batch workloads.

Since that date, DDC has experienced a problem producing shipping labels for the request processing system. The problem stems from inconsistent use of two executive systems for the partitioned schedule. Consequently, document requests are filled on a delayed basis, while all other operational work loads are on schedule.

Current Awareness Program (CAB) Increase - During FY 76 through FY 78, requests for CABs increased from an average 1306 to 1860 monthly. This is a 43 percent increase over normal work load.

August: Test and Acceptance of Interim System - A 30-day test and acceptance program for the UNIVAC 1100/82 system began on 4 Aug. When this is successfully completed, the OMNUS Disk subsystem begins a 30-day T & A. This will complete the installation of the interim computer system approved from GSA.

Port Sharing Capabilities - PLASTEC, Picatinny Arsenal, NJ, became the first remote terminal to utilize "port sharing" on 6 Sep. This capability enables a user to link two or more terminals to DDC. Cost savings will result to user and U.S. Government.

September: DROLS Terminal Conversion - Guidance and Control Information Analysis Center at Illinois Inst. of Technology Research Institute in Chicago was converted to a classified site on 21 Sep.

October: AGARD Panel Chairman - DDC's Administrator, Hubert E. Sauter, was elected Deputy Chairman-Elect, of the NATO/AGARD Technical Information Panel.

November: Microfiche Printing Systems - Two new Xerox 970 Microfiche Printing Systems have been installed to replace two older machines. These machines should help alleviate downtime and escalating repair and labor costs associated with older machines.

DROLS Terminal Activated - The U.S. Army Armor School, Fort Knox, KY, terminal was activated in an unclassified mode effective 30 Nov. There are now 66 classified, 29 unclassified, and 16 committed sites.

December: DROLS Terminal Upgraded - Martin-Marietta Aerospace of Orlando, Florida, upgraded their terminal to classified on 12 Dec, bringing the number of classified terminals to 67. Army Medical R&D Command at Fort Detrick, Maryland became operational in an unclassified mode on 14 Dec 78.

1979 -- January: Development of Orientation/Indoctrination Packages - DDC has contracted with Capital Systems Group Inc, Rockville, Maryland to review the objectives of, and propose approaches to, motivating R&D managers in the use of DoD scientific and technical information resources.

1979 -- <u>January</u>: <u>Data Base Study</u> - DDC, through sponsorship of a multiclient study directed by Link Resources Corp., has access to a study entitled "Strategies in the On-Line Data Base Market Place." Copies of the final study report, a reference for identifying problems and approaches in developing, providing, and marketing data bases, have been delivered to DDC. DoD affiliation allows DDC to reproduce and provide copies to bonafide DoD activities. Up to 16 hours of discussion with a member of Link study team on topics of DDC's selection is another feature of the contract.

<u>Disk Subsystem for Interim Upgrade</u> - Sperry Rand was awarded a contract on 8 Jan 79 for a Disk Subsystem on the Interim Upgrade computer system. This subsystem, scheduled for Jan 79 delivery, will be connected to the UNIVAC 1100/82. The purpose is to support new and expanding needs of Military users, DoD contractors, and grantees of the R&D community who use the DROLS system.

<u>NASA Center Access to IR&D Data Approved</u> - OUSDR&E (R&AT) approved release of Independent Research and Development (IR&D) data to six NASA centers. Formerly, IR&D data were available only to NASA Headquarters.

<u>R&D Program Planning Data Bank Availability</u> Enhanced - Previously, R&D Program Planning data were available to U.S. Government organizations only. Henceforth, these data will be available to all DDC registered users.

<u>February</u>: <u>Service Improved for Information Analysis Centers (IACs)</u> - On 5 Feb 79 all IACs began to access abstracts of limited documents both on display via terminal system and as part of their special format bibliographies. The documents to be accessed are those belonging to IACs and DDC document citations that an individual IAC has modified.

<u>Data Bank Reaches a Million</u> - One million records have been computerized from the technical report program. These reports are both DDC and IAC acquisitions; however, DDC has an older collection of Air Technical Index (ATI) and Technical Information Pilot (TIP) documents that are automated only when a request for a copy is received. Requests for ATI or TIP documents result in reassignment to the AD numbering series.

<u>March</u>: <u>Interim Upgrade of ADPE</u> - On 1 Mar, DDC initiated a Test and acceptance of the UNIVAC 8433 Disk Subsystem with the UNIVAC 1100/82 system.

<u>100th Terminal Added</u> - In March, the Lockheed Aircraft Corporation in Marietta, Georgia became the 100th terminal to gain access to the on-line system. (There are 70 classified and 30 unclassified terminals in the system.)

1979 -- <u>March</u>: <u>ADPE Savings</u> - Over $200,000 will be gained over the life
of a former 36-month rental contract by the 1 Mar 79 purchase of
a UNIVAC 1100/82 computer system, additional savings will be
realized thereafter.

<u>GIDEP Reports</u> - Arrangements were made to transfer 40,000 documents,
primarily GIDEP (Government Industry Data Exchange Program) from
Naval Surface Weapons Center at Dahlgren, Virginia. The collection
dates from 1941 and contains a wealth of unpublished information,
which the Naval Center feels will enable DDC to provide a valuable
service in making it available.

<u>RTIS Input</u> - The Remote Terminal Input System (RTIS) of the on-line
system is now being used instead of the Text Processing System (TPS)
to input text data for announcing technical reports. RTIS CRT
terminals replace TPS Typewriter terminals for a more efficient
input processing system.

<u>SBIE Milestone</u> - Input records from the Shared Bibliographic Input
Experiment (SBIE) sites no longer have to be re-keyboarded at DDC.
A special command entered via the Remote Terminal Input System
(RTIS) accesses the record from the on-line system file and places
it in RTIS working storage.

<u>May</u>: <u>DROLS Terminal</u> - The terminal at the Army Signal School at
Fort Gordon, Georgia, was activated in an unclassified mode on
21 May. The system now totals 110 terminals with 124 users.

<u>June</u>: <u>New Capability for On-Line System</u> - A new addition to the
DROLS System is the capability to scan narrative fields of selected
groups of DDC's collections. This capability permits a terminal user
to select a group of documents of probable interest and search
actual texts of citations for specific words or phrase occurrences.
This service will allow terminal users to locate specific information
more effectively.

<u>Accessing Federal Data Bases</u> - Two Texas-Instrument Terminals (Model 745)
were received on 13 June. These terminals will be used to experiment
with other DoD, federal and commercial data bases. Some of the systems
available on-line are: NASA Recon, Air Force Systems Command AFSC/FTD
CIRC II and InfoCen systems, NLM's MEDLINE, ARPANET's
Electronic Message System, Lockheed's DIALOG, N.Y. Times information
bank, and ORBIT system through the Systems Development Corporation.

<u>July</u>: <u>Micrographic Study</u> - The REMAC Information Corporation has
begun a study of Micrographic Methods, under contract to DDC. The
study objective is to identify alternative methods to improve technical
report processing.

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1979 -- **July:** **DROLS Terminal Activated** - The terminal at the Naval Ship R&D Center, Annapolis, Maryland, became operational in an unclassified dial-up mode on 27 June 79. This is the fourth dial-up terminal on the DROLS System.

Blossom Reports - Forty-one technical reports are being provided on a loan basis from the Research Department of the University of Maryland. These reports, concerning plasma dynamics, were prepared under contract to the Naval Research Laboratory. The loan copies will be photographed for the DDC collection and returned to the lender.

Behavioral and Social Science Reports - Efforts are under way to acquire 1,341 reports, notes, papers, and special publications from the Army Research Institute of Behavioral and Social Sciences (ARI).

Title Searching Capability Developed - The capability now exists for DROLS users to search the system by titles. On-line users had requested this capability.

New Distribution Limitation on Classified Reports - A recent revision of DoD 5200.1R, Information Security Program Regulation, permits sources to control secondary distribution of technical reports. Such authority limits distribution by DDC, however, the impact on the Center's work load is unknown at this time.

August: **Turnaround Time Goal Exceeded** - For the first time in more than a year, DDC achieved a 3.3 day "turnaround" time for paper copy technical report requests (turnaround is measured from receipt of request to mailing out document copy). To accomplish this goal, it was necessary to use a considerable amount of overtime and adjustments in shipping schedules for other products.

Input Processing Improvement - Tape cassettes for inputting data have been added to all DDC Remote Terminal Input System terminals.

Navy Data Dictionary System Installed at DDC - Representatives of the Navy Regional Data Automation Center installed their data dictionary system on DDC's computer system. The dictionary system is being made available in support of the DDC Systems Redesign/Conversion Project. The Navy System provides DDC with a capability to develop a similar system without the expenditure.

Atomic Research Reports Received - The Defense Nuclear Agency supplied 3500/declassified research reports on nuclear radiation by a special arrangement. These are 1950-era reports which will be released eventually to the public through NTIS.

October: **Center Name Change** - In ceremonies at DDC, Dr. Ruth Davis DUSDR&E renamed and rededicated the Center as the Defense Technical Information Center (DTIC) with an expanded mission. The services were attended by Lt. General Gerald Post, Director of DLA, other DoD officials, and the staff and employees of the newly named Center.

1979 -- Octoberː DROLS Terminal Activated - The terminal at RCA, Government Systems Division, Cherry Hill, NJ, became active in an unclassified, dial-up mode. There are now six terminals with dial-up access. The current total number for DROLS terminals is 113 and 127 users.

Acquisition Efforts - The transfer of 4,000 reports and 8,000 private papers on guerilla warfare, terrorism, agriculture, behavioral and social sciences, are being forwarded from the U.S. State Department's Foreign Affairs Research Documentation Center. In addition, 500 medical reports are being acquired from the USA Medical Intelligence Information Agency.

New Microfiche Collator Installed - A 120-Bin Norfin Collator was attached to the newly installed Photoneatrix Microfiche Duplicator for the Automatic Document Distribution Program. This collator replaces a carousel-type machine and features a modular expansion capability and a variety of operational modes.

Novemberː DROLS Terminal Activated - The terminal at the Air Force Office of Scientific Research, Bolling AFB, Washington, DC became active in an unclassified dial-up mode on 30 Oct.

Extended Access to Work Unit Information - Access to fields containing program, project, and task identification numbers has been granted to contractor organizations.

Title Searching Expanded - DROLS users have been advised that titles from the Work Unit Information System, Program Planning and IR&D are now accessible on-line.

DROLS Terminal Activated - An unclassified, dial-up terminal became active on 13 Nov at the US Army Aviation School, Ft. Rucker, Alabama.

MAI of Technical Reports - DTIC began using machine-aided indexing (MAI) for technical report accessions into the AD document collection. This process will assist in standardizing term selections for new reports.

Decemberː DTIC Receives British Reports - DTIC has made arrangements to receive 170 reports from the British Aeronautical Research Council, National Physical Laboratory, Teddington, Middlesex, to be included on the list of future distributions.

DROLS Terminal Activated - An unclassified, site-sharing terminal became operational at Ft. Lee, Virginia, on 3 Dec. The Army Logistics Center and the Army Quartermaster School will share the use of this terminal.

DROLS Terminals - Unclassified terminal at Ft. Bliss, TX on 10 Dec for sharing by Army Air Defense School and Army Sergeants Major Academy. Unclassified terminal at U.S. Army Field Artillery School, Ft Sill, OK, on 17 Dec.

Acquisition Program - DTIC will receive about 200 reports on research studies in military science from the US Military Academy. Previously, copies of these reports were released only by the office of the Academy's Superintendent.

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1980 -- **January:** **DROLS Terminal** - An unclassified terminal, at Army TRADOC Systems Analysis Activity, White Sands Missile Range, NM. A second terminal was added at the U.S. Army Medical R&D Command, Fort Detrick, MD on 15 Jan.

Automated Mailing Provides Savings - A Cheshire addressing machine is now being used to send out 1,379 copies of the index to limited documents releasable to DTIC users. Computer-generated mailing labels were attached by the new method in approximately 30 minutes. The manual process formerly used involved two days.

April: **DROLS Terminal** - A terminal at the University of California, Los Alamos Scientific Laboratory, Los Alamos, NM, was activated into the DROLS system.

Deputy Administrator Retires - The Deputy Administrator of DTIC, Mr. Herman W. Miles, retired from Federal Service on 4 Apr. Mr. Miles had been with DTIC and its predecessor agencies, the Defense Documentation Center and the Armed Services Technical Information Agency for 21 years.

DROLS Terminals - Two terminals were added to DROLS, which are: Hughes Aircraft Corporation, Radar Systems Group, Los Angeles, CA, and U.S. Army Ballistics Center (EMDATC and RMDCOM site sharing). These were activated on 10 Apr.

RTIS Enhancement - The capabilities to recall a document from mass storage and display it on a terminal screen in a format for on-screen correction was extended to the IR&D data bank. This will reduce terminal operator workloads in creation of input to this data bank.

May: **On-line Input to Work Unit Information System Data Base** - On 1 Jul, six Navy activities will have completed the transition from submitting paper copy input into machine-readable work units via the Remote Terminal Input System.

DROLS Terminal - A terminal in dial-up mode was activated at the Naval Oceanographic Office, Bay St. Louis, MO on 14 May.

Vietnam "Lessons Learned" Reports Released to Public - The Office of the Adjutant General, Department of Army, authorized DTIC to release all unclassified and declassified reports in "Operation Reports - Lessons Learned from the War in Vietnam" series to the general public. Approximately 2400 reports were identified for release through the National Technical Information Service.

June: **Proposed New Mission Assignment** - DTIC representatives met with Dr. Lloyd Leher, DUSDR&E, to discuss the proposed assignment to establish and operate a DoD data base for Manufacturing Technology.

1980 -- June: Diverse Terminal Access - Beginning 1 Oct, users may gain
access to the DROLS system by using any one of a wide variety of
terminals. This capability has been planned as a major feature
of the systems redesign project at DTIC, and is limited to unclassi-
fied information only. The DROLS system has been modified to
communicate with any terminal that employs the standard ASCII
asynchronous protocol.

DROLS Terminal - A terminal was activated at the Naval Training
Equipment Center, Orlando, FL on 20 June.

July: Expansion of SBIE - Six additional participants joined the
Shared Bibliographic Input Experiment (SBIE) on 2 July. They will
use the remote terminal input system to provide DTIC the input to
the technical report collection.

Enhancement to On-Line System - On-line users who operate unclass-
ified terminals will be able to display unclassified citations of
classified reports in the TR collection on 2 July. This service
increases usefulness of the DROLS system for users previously
denied access to these reports on-line.

R&D Interactive Computer Support - The interactive computer support
capability became operational on 22 Jul. This service provides
systems and programming personnel at DoD R&D organizations and
associated contractor facilities with remote access to the
Univac 1108 for development purposes. Computer programs/systems
and prototype or operational data bases are two programs to be
developed. This capability is unclassified and will be used by
DTIC for interactive program development and testing.

August: Extension of DTIC Services - For the first time, since
DTIC computerized data for the Plastics Technical Evaluation Center,
it has been made available to DTIC users.

DROLS Terminal Activated - A terminal at ADR Services, Inc., Vienna, VA
became operational in an unclassified mode on 18 Aug. There are now
127 terminals with access to DROLS.

September: Expanded Training Program for On-Line System - An inter-
agency agreement between DTIC and the Office of Personnel Management
has been signed to initiate a "Study of Training Options for the
Defense RDT&E On-Line System (DROLS)." As DROLS activates unclass-
ified dial-up service to an increasing number of users, training of
new users will require a significant amount of time. This study
is to review and select diversified training options for use by DTIC.

Machinability Data Center - Two members of the staff accompanied the
contracting officer (DESC) to METCUT in Cincinnati, OH, to identify
deliverables associated with the close of the Machinability Data
Center (MDC). A letter will be written identifying deliverables and
MDC will provide on actions and costs of closing the center.

1980 -- October: <u>AD Number to Appear in Security Classification Guide Indexes</u> - AD numbers and index sequence numbers for each security classification guide in the DTIC collection will be included in future indexes to ensure ease of ordering.

<u>Establishment of Metal Matrix Composites Information Analysis Center (MMCIAC)</u> - A contract was awarded General Electric Tempo, Santa Barbara, CA, to establish and operate a new IAC effective 1 Oct. MMCIAC will provide authoritative information to U.S. government agencies and associated contractors. Technology related to metal matrix composite materials, including application of these materials to Defense systems, will be provided by the DLA/ DTIC administered center.

<u>R&D Manager Multimedia Multinational Package</u> - Capital Systems Group delivered reproducible masters and one proof copy of required media, this completes work on the project. It was determined by DTIC management that these products have other DTIC applications.

<u>DROLS Terminals</u> - Thirteen new users joined DROLS using dial-up terminals on 14 Oct. There are now 22 users of the new service which was implemented on 1 Oct.

<u>Acquisitions of Ballistic Missile Documents</u> - Seventy documents (separate titles) were received from the Army Ballistic Missile Defense program concerning the Ballistic Missile Symposium.

<u>DROLS Access Via Tymnet</u> - Access to the DROLS system through the the Tymnet data communication network was implemented on 23 Oct, this capability will greatly reduce communication costs for new users of DROLS.

November: <u>Canada to Withdraw from Work Unit Information Exchange</u> - DTIC was informed on 4 Nov that Canada has terminated its work unit data base and will no longer provide input to the DTIC data base. A formal letter providing details affecting the change between U.S./ Canada will be provided. Canadian data in the DTIC system will be purged as requested.

<u>Increased Availability of Technical Information</u> - Major improvements were made on 19 Nov to increase availability and ease transfer of technical report data. Previously, classified technical report data was not available except in classified bibliographies and at classified terminals. Now descriptive data related to classified technical reports are available in unclassified versions to increase access and display on-line.

<u>NLDB Automation Project</u> - The Natural Language Data Base (NLDB) Automation Project has resulted in the development of a Lexical Dictionary File to replace NLDB. The new file has been tested and will be implemented in the Technical Report Machine-Aided Indexing process. This will increase the number of natural language phrases identified by machine-aided process by 20-30 percent over current process.

1980 -- **December:** <u>Conversion of Automated Files</u> - The entire thirty year collection of technical report descriptive data base has been converted from magnetic tape (37 reels) to mass storage disk packs (8 packs). The master file remains on magnetic tape for biweekly updating. The new file improves processing time for all bibliographies, reduces computer running time by eight hours daily and permits a more timely response to users.

<u>Ad Hoc Expert Group on Information Flow</u> - Mr. Hubert E. Sauter, DTIC's Administrator will serve as a member of the Ad Hoc Expert Group on Information Flow, along with members of the Departments of Energy, Commerce, State, Agriculture, NASA and NSF. The group will prepare information transfer recommendations leading to a U.S. policy and position at the 1981 United Nations Conference on New and Renewable Sourcing Energy.

<u>AGARD Panel Reappointment</u> - DTIC's Administrator has been reappointed as a U.S. member of, and U.S. Coordinator for, the Technical Information Panel (TIP) of AGARD, for DoD. The appointment is for three years effective 1 Jan 81. Mr. Sauter was also elected Chairman of TIP.

1981 -- **January:** <u>Administrator Named to Advisory Board</u> - Mr. Sauter, DTIC's Administrator, has been designated representative to the National Research Council's Numerical Data Advisory Board.

<u>Rotational Assignment Program</u> - DTIC instituted a rotational assignment program in which GS-15 Directors will rotate in positions effective 18 Jan.

<u>On-Line Duplicate Checking</u> - An on-line duplicate checking capability for technical reports began on 19 Jan. This capability permits remote sites and DTIC to check for duplicates for both in-process and completed process documents. This capability provides for the elimination of manual catalog card files. This capability has been a DTIC objective since the early days of automation.

March: <u>Procedural Change for the CAB Program</u> - DTIC modified its procedures in February to provide only unclassified bibliographies through its Current Awareness Bibliography (CAB) Program. Both unclassified and classified CABs contain references to documents identified in comparison to users' profiles; the only difference being a few intrinsically classified data elements suppressed from unclassified versions. The procedural change standardizes the two announcement publications, TAB and CAB, and reduces security risks as well as expediting delivery and saving costs associated with handling classified information.

<u>FEDSIM Customer Agreement Initiated</u> - A customer agreement with the Federal Computer Performance Evaluation and Simulation Center (FEDSIM) was initiated on 11 Mar to evaluate overall effectiveness and performance of UNIVAC 1100/82.

April: <u>Incoming WATTS Lines</u> - An experiment - Two WATTS lines were installed recently in DTIC as an experiment to determine whether this technique can provide more effective service to small R&D organizations

and small business contractors. Particular emphasis will be given to resolving customer problems in areas of registration, bibliographic services, document identification and reference services.

DTIC Employee at OUSDR&E - At the request of the Director of Research, OUSDRE(R&AT), a DTIC employee will be working with Dr. Gamota for a six-month period. Particular emphasis will be placed on follow-up actions to the DoD conference on information issues for the 80s.

Watertown Arsenal Collection - A collection totalling 4,000 ordnance test documents is being forwarded to DTIC. Of the first shipment of 118 documents, only 32 were duplicates. These are products of the Army Materials and Mechanics Research Center.

Air Force Budget Estimates Acquisitioned - DTIC efforts have resulted in acquisition of Air Force RDT&E budget estimates and associated descriptive program summaries. Previously, the unclassified/unlimited documents were distributed by the Air Force.

May: DROLS Enhancement - Users of DROLS can display the unclassified descriptive cataloging fields of all technical report citations over 10 years old. Previous displays of these citations were limited to accession number and unclassified title.

Full-Text Searching - Full-text searching is now available in the Work Unit Information System (WUIS). All words (except those on "stop word" lists) in the narrative portion of records can be searched.

DTIC Extends Reference Service Hours - Telephone service hours, in the DTIC reference service office, have been extended from 1700-2000 (8 p.m. ET). This service will accommodate users west of the Mississippi River as well as east coast users who work later hours.

DROLS Manuals - Two new manuals for the on-line system, dated May 81, have been published for use of on-line sites.

June: Access to IR&D Data Base - OUSDR&E granted access to the IR&D for the National Highway Safety Administration.

Source Hierarchy/Source Header Published - These two separate publications relate to contributors to document collection and data bases at DTIC. The hierarchy contains linkages to data cataloged under source names; the header lists individual organizations that contribute products.

DROLS System - Full-text searching is now available for work units, program planning and independent research and development data bases through the DROLS system.

Air Cleaners Installed - Two air-cleaning machines were installed in the Xerox 970 area to eliminate toner dust and other pollutants. The purposes are to enhance working environment and protect microfiche.

1981 -- **June:** <u>New Data Base Demonstrated</u> - The JOUR data base was demonstrated to a group of DoD librarians. It was adopted by DTIC to manage its journal collection in the technical library. The system simplifies acquisition, check-in, circulation and the control of journal holdings. JOUR could be modified in the future to produce a combined list of journal holdings for several DoD libraries.

August: <u>MATRIS Transfers to DTIC</u> - DTIC and Naval Personnel Research and Development Center (NPRDC) met to work out details of transferring responsibilities and personnel for the Manpower and Training Research Information System (MATRIS) from NPRDC to DTIC. MATRIS will be transferred to DTIC in FY 82.

<u>Service to Small Business</u> - DTIC began registering and providing unclassified services to small business firms certified as participants in the Defense Small Business Advanced Technology Program. About 150 firms will participate in the program.

<u>Improved On-Line Document Order Procedure</u> - A new document order system has been installed on the UNIVAC 1108. This will eliminate additional keypunching and card-to-tape steps for daily request processing operations and will reduce input transaction errors.

<u>Remote Input Capability Expanded</u> - Six additional sites now have capability to enter technical report data via CRT terminals. These include Headquarters TRADOC, TRADOC Systems Analysis Activity, U.S. Army Aviation School, U.S. Army Air Defense School, Naval Coastal Systems Center, and U.S. Army Armament Materiel Readiness Command.

<u>Implementation of a New Data Base Management Capability</u> - On 13 Jul, DTIC implemented production use of a Data Base Management System controlled Technical Report Direct File. This file is currently used for all off-line bibliography products. Efforts are under way to extend its use to the DROLS System.

October: <u>New Directive Regarding DTIC</u> - DoD Directive 5100.36, DoD Technical Information Program, 2 Oct 81, includes the charter for DTIC's mission and responsibilities. The directive supersedes DoD Instruction 5100.38, Defense Documentation Center for Scientific and Technical Information.

<u>Xerox 9700 Installed</u> - A Xerox 9700 Electronic Printing System was installed at DTIC on 1 Oct. Acceptance testing began with implementation of duplex printing of demand Technical Report Bibliographies and Current Awareness Bibliographies. This system will increase printing speed, create more legible copies and result in substantial savings.

1981 -- (No significant events in Nov - Dec 81)

1982 -- January: UNIVAC 1108 Computer System Upgraded - The
operating system of the UNIVAC 1108 Computer was upgraded
to eliminate "sign-on" problems by ADPE time-sharing service
users. This new level should enable more efficient placement
of mass storage files.

SBI Network Expanded - Twenty-one sites now participate in
the Shared Bibliographic Input (SBI) program that began as
an experiment in 1977 to lower cost and increase efficiency.
Under this program one-time entry from sites (of standardized
descriptions of technical reports) prevents the large-scale
duplication of effort that previously existed.

TAB Carries ITAR Warning - DTIC's Technical Abstract Bulletin
(TAB) and companion indexes display cover page notices limiting
distribution of copies. The International Traffic in Arms
Regulation (ITAR) statement warns of release to foreign
recipients without obtaining an export license.

February - DTIC to Use Acquisition Data Base - Personnel
are being trained to use an in-house acquisition data base to
assist in eliminating duplicates and to track acquisition
processing of documents for the Technical Report Program.

DROLS Adds Sites - Four new sites were added to the DROLS
System bringing the total number of sites to 481.

WUIS Current Funding Data Available To Contractors - Data
fields fiscal year funds and CFY-1 funds are available to
contractors who request Work Unit Information System searches
via the batch or DROLS system.

First Direct TR Microfiche Input Received - In support of
DTIC's goal to accept technical reports in formats other
than hard copy as input, the Pacific Missile Test Center at
Point Mugu, CA has submitted the first silver master
microfiche for the TR master AD file. Direct Microfiche input
will result in significant savings by avoiding duplicate
effort and reducing mail costs. Physical quality will be
better because microfiche will be received of original
report not a photo copy from which to produce microfiche.

March: ITAR Statement on TR and CA Bibliographies - On
19 Mar, DTIC implemented the display of the International
Traffic in Arms Regulation (ITAR) statement on all Technical
Report and Current Awareness Bibliographies. Previously
this statement (which limits access or release of publications
to foreign recipients) appeared on DTIC announcement bulletins
only.

SBI Expands - Total participants in the Shared Bibliographic
Input (SBI) program is 29 with the recent addition of six
Defense organizations.

1982 -- **March:** <u>DTIC Studies Economic Value of Technical Information</u> - Twenty-five commercial data bases were searched on subjects of technology transfer and cost (or value) of information. This research effort was conducted to study the economic value of technical information.

April: <u>Contract Award for Front End Processor</u> - The Sperry UNIVAC Company was awarded a contract to acquire a Front End Processor to the existing 1100/82 computer system at DTIC. This equipment will support the expanding requirements of DROLS, and enable a more flexible telecommunication service.

<u>DROLS System Exceeds 500 Users</u> - DTIC achieved a major milestone with the 16 April addition of the 500th user. The terminal system consists of:

    16 - DoD; 99 - Army; 48 - Navy

    43 - Air Force; 21 - other government;

    13 - IACs; 209 - contractors; and

    60 - DTIC.

May: <u>Mechanical Properties Data Center Close-Out</u> - A reduction in funds for operating Information Analysis Centers resulted in the discontinuance of contract for operating the Mechanical Properties Data Center as of 30 Apr. Deliverables from this center were shipped to DTIC's program manager for IACs.

<u>FLC Highlights DTIC Publication</u> - DTIC's Referral Data Bank Directory was highlighted at the Spring Federal Laboratory Consortium (FLC) meeting. The outstanding coverage of DoD laboratories in this publication promoted its use as an example from which a similar directory of federal laboratories will be prepared.

<u>DROLS Operating House Extended</u> - The Defense RDT&E On-Line System (DROLS) hours of operation now permit system access from 0800 - 1930 each workday. These new hours respond to users requests and are conducive to increased productivity in addition to more efficient services.