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1 July 1952-31 December 1952

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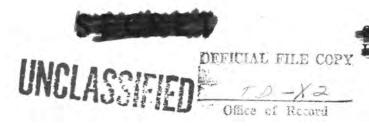
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## HISTORY OF AIR TECHNICAL INTELLIGENCE CENTER

I JULY 1952 - 31 DECEMBER 1952



AIR TECHNICAL INTELLIGENCE CENTER
WRIGHT-PATTERSON AIR FORCE BASE
OHIO

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NOTE FOR FILE:

History of the Air Technical Intelligence Center

Supplement No. 1

1 July 1952 - 31 December 1952 (TS-2799-A)

Classified Top Secret - Filed in ATIC Top Secret Vault.

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INCORPORATED INTO THIS HISTORY AS PAGES 78 THROUGH 82)

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Classification cancelled

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Auth: By: Date:

Major M.S. Sturgis 29 January 1953

HISTORY OF

AIR TECHNICAL INTELLIGENCE CENTER

1 JULY 1952 - 31 DECEMBER 1952

(Including TOP SECRET Supplement Number One)

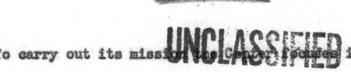
Prepared by Mr. Donald M. Webb
Air Intelligence Office
AIR TECHNICAL INTELLIGENCE CENTER
29 JANUARY 1953

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its efforts on these To carry out its mission two objectives: (1) prevention of technological surprise from any foreign source, and (2) assisting the research and development agencies of the USAF in the development of countermeasures against such foreign technical development.





TO THE HISTORY OF

THE AIR TECHNICAL INTELLIGENCE CENTER

For the Period

1 July 1952 - 31 December 1952

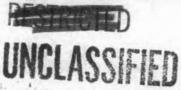
This installment of ATIC's history differs from its predecessors not only in content but in format. In the past, Section and Branch activity have been presented as such; in this, at the request of the Intelligence Directorate's Historical Officer, activities are presented on a divisional and office basis, with Branches and Sections merging their activities to present an overall picture. This, it is anticipated, will make it easier to see the forest rather than the trees. It is also designed to eliminate the extraneous and routine as much as possible.

Another deviation may be found in the absence of exhibits. These, too, were omitted by request. It was suggested that the History contain no appendages and that necessary references be incorporated in footnotes. This is understandable when it is considered that the ATIC History will be incorporated with the Directorate's, which, in turn, becomes part of the larger USAF History.

This portion of the ATIC History involved many contributors. It isn't the work of a single individual, but a team operation, with Section, Branch and Division contributors. The names of the authors on







the title sheet are those of the men who synthesized, edited, proofread, coordinated and assembled the final version, added the Foreword and Glossary, and supervised the operation.

Even this preamble is a departure - so far - from preceding forewords. These described the events before and during the organization of the Center. Perhaps, for the benefit of those who came in late, portions of this background material should appear here. Its significance is such that it will bear repetition.

The Air Technical Intelligence Center was officially designated as such by General Order Number 31, Hqs USAF, dated 1 June 1951. The order made the effective date of the designation retroactive to 21 May 1951, and defined the Mission of the Center as follows:

"The mission of the Air Technical Intelligence Center is to produce Air Technical and Scientific Intelligence under the operational control of the Directorate of Intelligence, Deputy Chief of Staff, Operations, Headquarters USAF."

Prior to the date of the official designation cited above, responsibility for the production of air technical intelligence had been delegated to the Intelligence Department of the Air Materiel Command. Since this Department was providing air technical intelligence not only for AMC but also for the Air Research and Development Command and other USAF components, it was considered advisable to place the Center directly under Headquarters, USAF, that it might better serve the United States Air Force as a whole.



# OFFICE OF THE CHIEF

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#### OFFICE OF THE CHIEF

ORGANIZATION: The Office of the Chief, ATIC, is composed of the Commanding General, the Deputy Commander, the Executive Officer and the Assistant to the Chief. The staff consists of the Inspector General, the Scientific Advisor, the Air Intelligence Officer and the Policy and Management Officer. Subordinated to the Inspector General are the Internal Security Section and the Office of the Air Inspector. Similarly subordinated to the Policy and Management Office are the Personnel, Comptroller and Air Adjutant General Branches.

FUNCTIONS: The functions of the Office of the Chief, ATIC are to accomplish the air technical intelligence phases of the overall mission of D/I USAF, as follows:

To provide air technical and scientific intelligence services for USAF as required to prevent technological surprise from any source;

To produce air technical and scientific intelligence studies and estimates of alien capabilities to conduct aerial warfare;

To provide basic data on foreign air weapons and related materiel, necessary in the production of recognition manuals and performance handbooks;

To nominate, indoctrinate, train and provide technical guidance for ATLO's as required for the Air Attache system, and as required for various overseas Commands;



To conduct technical orientation and specialized training of attache personnel prior to their departure for foreign duty;

To indoctrinate selected Air Force personnel in the techniques necessary to conduct air technical and scientific intelligence operations in the field;

To investigate and analyze reports of unidentified aerial objects or of phenomena of possible concern to the air defense of the US;

To provide administrative services for WADC and AMC for their foreign scientists' program;

To provide air intelligence for AMC, WADC and certain components of ARDC;

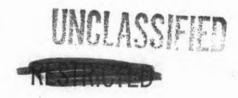
To disseminate intelligence information concerning foreign air technological and scientific developments required by USAF research and development program;

To provide, as required, D/I USAF representation on Air Force and Joint boards and committees concerned with technical and scientific intelligence;

To establish requirements for air technical intelligence information, data and materiel and to provide technical guidance to collection agencies;

To participate in certain phases of the domestic exploitation program of other intelligence agencies as directed;

To provide limited translation services to D/I USAF, WADC, CADO and AMC upon request;





To effect necessary administrative, logistical and funding support, and coordinate with concerned agencies for accomplishment of the assigned mission of the Center.

The overall functions of the office are command and administrative, and no projects are assigned.

The functions of the Scientific Advisor's Office are to advise and counsel the Commanding General relative to the scientific aspects and technical competence of the Air Technical Intelligence Program; to insure complete coordination integration of ATIC activities with other USAF programs related to the offensive and defensive capabilities of the Air potential of the United States; to assure the Commanding General that Air Technical Intelligence production meets the requirements of all using agencies; and to coordinate and recommend disposition action in connection with produced Air Technical Intelligence studies and reports.

Other Staff Office functions are described separately.

Colonel Frank L. Dunn returned from leave and reassumed command of ATIC on 23 July. Colonel Dunn departed for Air War College, Montgomery, Alabama, for permanent change of assignment on 9 August and was succeeded by Colonel John A. O'Mara, AO 489660.

Brigadier General William M. Garland, 638A, USAF, reported for assignment to the 1125th F/A Group on 16 September for duty as Chief of

- 1. General Order #5, 23 Jul 52 (ATIMA)
- 2. Par 3, SO #52, 27 Mar 52 as amended by par 4, SO #79, 9 May 52 (ATIMA)
- 3. General Order #6, 9 Aug 52 (ATIMA)







the Air Technical Intelligence Center. General Garland assumed command 5 of this organization on 17 September 1952, vice Colonel O'Mara, relieved.

A Space, Installations and Communications Committee was established on 25 November 1952. This committee was established to take action on problems in these categories which could not be resolved by the Technical Services Division through normal coordination. The Executive Officer, ATIC, is chairman of this committee.

Mr. John S. Honaker, Assistant to the Chief, officially visited the ATL and ATIL offices in Europe, as well as certain personnel at Hq USAFE from 13 July to 18 August. Mr. Honaker travelled as a member of the D/I USAF Staff Team. The team visited England, France, Germany, Austria and Italy to examine USAF intelligence activities, discuss requirements and assist with problems.

The Organization and Personnel Committee was established on 18 November. This committee was established for the purpose of surveying the mission, functions, and job describtions of ATIC to insure that each position has a firm and direct relationship to the Center's mission, that the Position Description is written in support of the assigned functional responsibilities, and that the person assigned to the position is carrying out the intentions of the assigned duties.

- 4. Par 4, SO #170, 27 Aug 52 (ATIMP)
- 5. General Order #7, 16 Sep 52 (ATIMA)
- Ltr Order #0001221, ATIC, 25 Nov 52 (ATIMA)
- Ltr Order #0001199, ATIC, 18 Nov 52 (ATIMA)



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## STAFF OFFICES

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#### POLICY AND MANAGEMENT OFFICE

ORGANIZATION: Colonel Sanford H. Kirkland, Jr. was assigned as Chief, Policy and Management Office on 1 Dec 52, vice Lt Col A.E. McKenzie, Acting Chief, relieved. As Chief, Colonel Kirkland is on the staff of the Commanding General. The Policy and Management Office is composed of the Personnel Branch, Comptroller Branch and the Air Adjutant General Branch.

FUNCTIONS: The functions of the Policy and Management Office include:

Advising and assisting the Commanding General and operating staff in developing and executing plans and programs to insure accomplishment of ATIC objectives, including uniformity of operations, and effective utilization of manpower, funds and materials.

Supervising budget and fiscal matters with respect to fiscal policies, procedures, records and reports to insure compliance with AF regulations and instructions.

Advising the Commanding General of the current status of funds, the effectiveness of financial programs and other budget and fiscal matters.

Directing and conducting continuing studies within ATIC in order to recommend policies governing organization, manning methods and procedures.

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Advising the Commanding General ATIC on matters concerning the current status of the personnel and administrative practices and policies of the Center.

Supervising, through the Air Adjutant General's Branch the AG functions of the Center, including publication of official directives, authentication of travel requests and other official documents, establishing and monitoring correspondence control procedures, and advising the Commanding General on matters of protocol.

Supervising the administration of matters involving military personnel and maintenance of all military records for the Center.

Supervising the necessary functions in the employment and administration of civilian personnel.

ACTIVITY: At the direction of the Commanding General two committees or boards were established to assist in management of the Center: Organization and Personnel Committee and Personnel Management Board. ATIC office instructions defining the method of operation of these committees and defining ATIC personnel policies and practices have been prepared and are being coordinated with the Base Civilian Personnel Office.

As an aid to operating components, an ATIC Policy Book was begun by the Management Analysis Section. Correspondence, directives, and other source material are being reviewed to extract policy decisions for inclusion. The material is being classified by subject, indexed, and cross referenced. A copy of the Policy Book will be distributed

<sup>1</sup> LO 0001199, 18 Nov 52

<sup>&</sup>lt;sup>2</sup> LO 0001232, 28 Nov 52

to the Commanding General and to each division and staff office.

A Supervisory Management Notebook was also prepared and distributed to each division. This notebook is cumulative in nature. In it will be filed material collected by supervisors, and other material subsequently distributed by the Policy and Management Office. In cooperation with the ATIC Indoctrination Branch, an Employee's Notebook is also under preparation.

A system of informal review by representatives of the operating components prior to formal coordination was installed and has resulted in more realistic procedures and clearer, more usable directives. Under this system, representatives of operating components meet with the methods analyst to determine what procedures need revision, which ones need to be abolished, which ones need to be clarified, and if new ones need to be devised. The published procedure is the result of the cooperative planning of this group. The operating representatives also serve as key people for installing and maintaining the procedure and for checking on its effectiveness.

In the second half of the year, there was a noticeable decrease in form requests received, most of the requests being for reprints of established forms. This indicates that, for the most part, necessary local forms have been established. The computing of more realistic stock levels and control of distribution remain problems to be solved.

During the period, the continuing review of organizational structure, alignment of functions, position and manpower requirements, conducted by the Management Analysis Section, progressed satisfactorily. A position classification survey was initiated by the Base 1 October. Results appear on the next page.

#### STATUS OF ORGANIZATION AND POSITION CLASSIFICATION SURVEYS

COMPONENT	ORG. SURVEY	POS. CLASS. SURVEY	RESULTS
Technical Anal. Div.			
Assoc. Equip. Br. Armament Section	Completed 3 Jul 52	not scheduled	l new position approved. Implementation pending classification survey.
Materials & Methods Section	Completed 29 Jul 52	Completed 26 Nov 52	6 position approved for upgrading. Concurred in by position classification survey. Related position and personnel actions have been initiated.
Electronics Br.			
Science & Com- ponents Section	Completed 16 Oct 52	In process	12 new positions ap- proved. Implementa- tion of changes held pending completion of classification survey.
Countermeasures Section	Completed 24 Nov 52	Scheduled for 1953	2 new positions ap- proved. Implementation pending classification survey.
Technical Requirements Division			
ATI Program Branch	Not considered necessary at this time.	Completed 14 Nov 52	No changes in position allocation.
Technical Services Division			
Document Ser. Branc Graphic Services & Reproduction Sec.	stable	In process	
Policy & Management Office			
Adjutant General Branch	In process	In process	



Redistribution of manpower allotments is under consideration, necessitated by a cutback of positions authorized from 440 to 393. To date 26 positions have been cancelled and 21 more need to be eliminated. Completion of this project is held pending action on proposed organizational changes and redistribution of reduced allotments.

Organizational changes proposed by operating components have been reviewed and recommendation to the Commanding General is under preparation. Revision of functional statements and organizational charts, started in November 1952, has not been completed because of these pending organizational changes.

With the establishment of the Inspector General's Office<sup>3</sup> assistance was given to the Inspector General in the preparation of position requirements and functional statements. Functions formerly performed by the AMC Inspector General were absorbed by this office, which evolved from the former ATIC Air Inspector's Office. Greater emphasis will be placed by the Inspector General's Office on organizational inspection.

On 1 July 1952, cost accounting was added to the functions of the Budget and Fiscal Section. Prior to this time, cost accounting services had been rendered ATIC by Hq AMC Comptroller. One civilian, a Government Cost Accountant, was transferred with the function, and one airman, Cost Accounting Analyst, was assigned to the function. Changes were made in the former cost accounting system which reduced considerably the amount of paper work required. Job time reporting by operating components was first changed from a daily to a weekly basis (1 Jul 52), then

<sup>3</sup> GO No. 10, 22 Oct 52



to a monthly basis (1 Oct 52). Forms and instructions for operating components were revised and published in an office instruction. 4 Resultant annual savings are as follows:

Daily Reporting	Weekly Reporting	Monthly Reporting	
250 reports per year per person.	52 reports per year per person.	12 reports per year per person.	

With the installation of the A & E Cost Accounting System, 1 July 1952, local report forms were revised and a single ledger system of accounting was installed to cost by projects and functional areas, as well as by organizational components. Manhours required to prepare the new report average 235 per month as contrasted with 509 for the old type of report. In addition, better factual data is available for support of budget estimates, project planning, and management control.

The budget estimates for fiscal year 1954 covering operational requirements of ATIC under Project 731, Project A, were presented and successfully defended by the Comptroller, ATIC, before the Budget Advisory Committee, Headquarters USAF, and in a joint hearing of the Department of Defense Budget Committee and the Bureau of the Budget.

Supplementary justification for Project 731, Project A was furnished by the Chief, Budget and Fiscal Section, in company with Mr. John S. Honaker, Assistant to the Chief, ATIC, to Colonel Young, AFOIN-X, on 28 August 1952.

Meanwhile, the Secretary of the Air Force established a ceiling for Project 731, Project A for fiscal year 1954 at the same level as the approved budget program for fiscal year 1953. Accordingly, the estimates submitted by the Center were revised in certain areas to meet this figure.

<sup>4</sup> ATIGOI 172-1, 1 Oct 52, "Job Time Reporting"
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The budget estimates for Project 481, covering civilian pay, travel, supplies and other items for fiscal year 1954, were presented through the Directorate of Intelligence to the Secretary of the Air Staff and Hq USAF Manpower Commission and approved with minor exceptions.

The annual financial plans and funding programs for Projects 481 and 731, covering all operational requirements for fiscal year 1953, such as civilian pay, military and civilian travel, contractual services, supplies, equipment, transportation and air technical intelligence items, were finalized and programmed, effective as of 1 July 1952. For the first time, the funding program was made to correspond item by item with budget program as submitted for fiscal year 1954. This arrangement will provide year-end budgetary data for evaluating and supporting future estimates and at the same time permit ready adjustment of programmed items by the Comptroller to meet commitments in any area as needed.

In order to insure maximum utilization and economy in the use of appropriated funds, various devices were instituted by the Comptroller, and the Chief of Budget and Fiscal Section, to control expenditures. No travel requests were approved for funds expenditure unless such requests had been previously justified by the initiating division and approved by the Chief, ATIC.

The Center's allotment for long distance telephone calls was distributed to each division and office on a monthly quota basis. Each division and office was required to submit a listing of each call made, by number. Checks were also imposed on all procurement documents to insure the propriety of expenditures and accuracy of costs. These procedures

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have resulted in a noticeable savings in travel costs, a reduction in long distance calls and procurement cost.

The Budget and Fiscal Section prepared an office instruction on the use, accounting and reporting of contingency funds, including funds for secret and confidential expenditures, which was published as a confidential office instruction for limited distribution to overseas stations. On 13 Aug 52, the Section Chief delivered an indoctrination lecture on the use of these funds before a class of fourteen ATLO's in training at the Center. In the past, these lectures have proved highly beneficial in orienting these officers in the proper use of these funds.

By the end of the first half of fiscal year 1953 fully 80 percent of procurement funds allotted the Center had been committed. Approximately two thirds of the total commitment was charged to a single contract, the renewal of Project "Stork." This percentage of commitment is well above the normal expectancy for submitting purchase requests before the 1 March deadline usually established by the Procurement Division, AMC, for executing contracts with year-end funds. However, there has been serious delay on the part of the Procurement Division, AMC, in placing the annual contract for translation services despite the fact that procurement action had been initiated by the Center prior to the start of FY 1953 in an effort to obtain a full 12-months' service from this type of contract. The delay was due primarily to a desire to provide more than one source and subsequent failure to locate qualified bidders. As a result, a six months' backlog of foreign language documents has accumulated for translation.

<sup>5</sup> ATICOI No. 172-2 "Contingency Funds, Project 731" (CONFIDENTIAL) 22 Oct 52

In December 1952 maintenance of command records was transferred from the 1020th USAF S/A Wing, Fort Myer, Va. to the ATIC Personnel Branch.

During the six month period ending 31 Dec 52, 384 position and personnel actions for civilians were processed by the Civilian Personnel Section. Breakdown of these actions is as follows:

Position establishment Position reclassification Position cancellation Employment (Inhire)	8 (21 basic, 27 identical additional) 12 31
Reassignment	34
Promotion	1
Separation	39
Functional Transfer	3
Miscellaneous	2

Of the above 384 actions, 214 required review and analysis by the Management Analysis Section. As of 1 July 1952, 297 civilians were assigned. At the end of the period, 333 civilians were assigned, an increase of 36 during the period.

An intensive drive is being conducted to correct malassignments.

This drive was given further impetus by recommendations from the Organization and Personnel Committee, which approved and ordered implemented by the Commanding General. As of 31 Dec 52, only 12 malassignments were known to exist. These malassignments will be corrected as soon as position classification audits have been completed by the Base Salary and Wage Section.

Satisfactory progress was made in improving the communications and records programs under the Air Adjutant General. Procedures for review, recording, and follow-up correspondence were revised and installed. As correspondence control desk was established in the Air Adjutant General's



Office to function temporarily until it could be moved to the Mail Room.

As soon as the Mail Room can be moved to an area adjacent to the AG Branch,
this function will be transferred to the Mail Section.

Centralized files for correspondence were established in the Air Adjutant General's Branch to provide a centralized source of reference. Previously, official file copies of correspondence were filed within the component of primary interest, which was designated an Office of Record. As a result of centralizing correspondence files, material is more easily located and the number of Offices of Record has been reduced.

The distribution formula for ATIC publications was revised resulting in more equitable distribution and elimination of waste through reduction in number of copies required. Procurement and distribution of other than ATIC publications to insure timely receipt by working level personnel who have need for the publication, remains a problem which has been further complicated by transfer of the Authority Reference Library from the Adjutant General Branch to the Inspector General's Office on 22 Oct 52.

A study has been initiated to devise a solution. In addition, a suggestion was submitted to D/I USAF that a statement be made in D/I administrative publications concerning applicability to ATIC. The adoption of this suggestion has eliminated much of the confusion that formerly existed relative to interpretation, distribution, and application of D/I directives.

The Records Disposition Project, initiated in the preceding period

(1 Jan 52 - 30 Jun 52), was completed. Schedules were revised as necessary
and procedures for preparing schedules were clarified with the Records



Management Officer, Hqs, USAF. Further revision and refinement of disposition schedules are in process. Education of operating personnel in the AF Records Management Program remains to be accomplished.

A standardized format for requesting orders for ATLO personnel being transferred to overseas assignments was devised jointly with the ATI Program Branch. This format simplifies the preparation of order requests and serves as a check list for information required in PCS Orders for overseas movement.

On 28 Aug 52, 2nd Lt Barbara P. Hanawalt replaced Major Robert R. Sneider as ATIC TOP SECRET Officer, Custodian of Non-Cryptographic Registered Documents, and Chief of the Registered Documents Section, Air Adjutant General Branch.

An inventory of all TOP SECRET, Registered, "X", and all other highly sensitive documents under the jurisdiction of the Registered Documents Section was completed 15 Aug 52. Operating procedures for control of these documents were standardized, published, and installed 22 Aug 52. Project 602 pertaining to "X" documents was transferred to the Document Services Branch, Technical Services Division, 25 Sep 52. Stand-by duty on holidays and week-ends for receipt of special incoming TOP SECRET messages was established in October.

ATICOI 205-5, 22 Aug 52, "Control of TOP SECRET, Registered, and 'Restricted Data' Documents".

#### OFFICE OF THE INSPECTOR GENERAL

ORGANIZATION: The Office of The Inspector General, ATIC, was organized on 17 October. Concurrently, Lt Col James P. Gentry, Jr, AO 900704, formerly assigned as The Air Inspector, was redesignated as The Inspector General. The Inspector General is on the Staff of the Commanding General. The functional components of the Office of The Inspector General include The Inspector's Office, and the Internal Security Section. Functional responsibility for the latter was transferred from the Air Adjutant General's Branch, Policy and Management Office, to the Office of The Inspector General on 22 October.

FUNCTIONS: To keep the Commanding General informed of the tactical, logistical and administrative efficiency of the Center; To keep the Commanding General advised on the state of morale and welfare matters, as pertain to military and civilian personnel of the Center; to conduct periodic inspections of the Center and to make special investigations of matters when necessary; to conduct personal conferences for military and

- 1. GO #10, ATIC, 22 Oct 52
- 2. Par 1, PAM #55, ATIC, 24 Oct 52
- 3. GO #10, ATIC, 22 Oct 52

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civilian personnel assigned to the Center; to review and analyze inspection reports, board proceedings, policies, office instructions,
and other miscellaneous correspondence and directives, and to keep
the Commanding General advised concerning their implementation; to assume responsibility for the internal security of the Center; to perform such other duties as are directed by the Commanding General.

Major Coleman D. Kuhn was assigned as The Inspector (and Acting 4
Inspector General) on 4 December after Colonel Gentry went on terminal leave, 1 December, prior to reverting to inactive status.

On 18 December, the first inspection was initiated in the Technical Requirements Division. This inspection was completed on 31 December, and the report is in the process of preparation.

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<sup>4.</sup> Par 2, PAM #67, ATIC, 4 Dec 52

<sup>5.</sup> Par 1, SO #189, ATIC, 1 Dec 52



#### THE AIR INTELLIGENCE OFFICE

FUNCTIONS: The Air Intelligence Office is charged with the performance of all normal A-2 functions, conducting oral briefings and preparing written reports on strategic, tactical, logistical and technical intelligence for Commanding Generals and Staff Officers of the Air Materiel Command, the Wright Air Development Center and the Air Technical Intelligence Center. In implementing these responsibilities the Air Intelligence Office obtains and studies all available intelligence information pertinent to the missions of the serviced Commands: collates and interprets all such information in the light of the missions of these Commands; takes such action as will most efficiently insure that these Commands are advised at all times of alien capabilities, intentions and related factors that may affect them in the discharge of their responsibilities. Such action includes maintenance of the AMC Air Room; preparation of maps, charts and other visual aids; oral briefings; written dissemination of daily, weekly and ad hoc intelligence products.

PERSONNEL: On 1 October, Major Murrah S. Sturgis replaced Major Spencer Whedon as Chief of the Air Intelligence Office. Major Whedon 1. Par 1, PAM No 51, 13 Oct 52

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was assigned on this date to an overseas post. Expanding responsibilities necessitated the assignment of five additional airmen to the Office.

PUBLICATIONS: The Air Intelligence Office continued publication of the daily AIR TECH INTSUM and DIRAMA and the weekly ATIC BULLETIN, all described in foregoing installments of the history of the Air Technical Intelligence Center. Distribution of these publications remained essentially the same.

Principal publication problems remained essentially the same also. Chief among these was the continuing problem of obtaining technical intelligence information to meet the requirements of the weekly BULLETIN. Though the primary purpose of the publication was still to review current air technical intelligence information, and though a complete evaluation of this information was not necessarily a prerequisite for publication, all of the reports for the BULLETIN were subject to a careful preliminary evaluation in the interests of authenticity and accuracy. This preliminary evaluation was especially important in view of the fact that the BULLETIN had been made available to many agencies within the National Military Establishment.

In this preliminary evaluation, the necessity for care and painstaking coordination complicated, of course, the problem of completing timely reports for publication in the BULLETIN. This problem was already difficult because of the extensive processing of most intelligence documents in their transmission from the originators overseas to the analysts and intelligence specialists in the operating sections of



the Technical Analysis Division; and the process of evaluating and coordinating these documents within the Division entailed further, unavoidable delays in the preparation of material for publication in the BULLETIN.

Moreover, the available source materials failed to produce a large volume of information suitable for use in this periodical. In the course of any one week the reports forwarded from the Technical Analysis Division to Air Intelligence Office for consideration in the selection of material for the BULLETIN rerely exceeded 10 in number. It should be pointed out here that all of these reports were prepared, by operating sections within the Technical Analysis Division, primarily for publication in the division's weekly periodical, PRELIMINARY ANALYSIS OF THIS WEEK'S FOREIGN TECHNICAL DEVELOPMENTS, which was circulated to Air Technical Intelligence Center personnel exclusively. After these reports had been screened for material suitable for dissemination outside the Center, the average number of usable reports per week had been reduced to a figure substantially under 10.

Personnel in the office of the Commanding General, the Technical Analysis Division and the Air Intelligence Office were aware of the problems involved in the publication of the BULLETIN and were endeavoring to work out satisfactory solutions for these problems, but the principal, basic problem — the problem of obtaining intelligence information that meets the requirements for timeliness and authenticity — remained unsolved.





TOPICAL INTELLIGENCE: In fulfilling its assigned responsibilities to AMC and WADC, the Air Intelligence Office provides classified and unclassified intelligence pertinent to the missions of the following: Mutual Defense (MCI); Supply (MCSM); Industrial Resources, Foreign Procurement and Industrial Services Branches (MCPBXS and MCPBXS-1); Psychological Warfare Office (MCAF); Special Weapons (MCSW); Flight Research Laboratory, Metallurgy Group (MCRRL); Aero-Med Laboratory, Personal Equipment (MCRDO); WADC Inspector General's Office (MCI); AMC Special Plans Section (MCOPXS); AMC Provost Marshal's Office (MCEP); and Industrial Resources, Manpower Branch (MCPBXM).

The above components have requested and are receiving intelligence in these categories: logistics, training, storage and port facilities, pipe-lines, clothing requirements, maintenance capabilities, air materiel production, strategic minerals, high melting point intermetallic compounds, powder metallurgy, precision casting processes, foreign procurement potentials, off-shore purchasing information, new manufacturing techniques, new products applicable to USAF production, Biological and Chemical Warfare developments, Psychological Warfare techniques, Communist patterns and activities which might result in USAF work stoppages, availability and/or production capacity for machine tools, hydroelectric plants, electrical developments and Arctic floating islands.

From 1 July to 31 December, 1014 intelligence reports were referred to the components serviced, bringing the total to 2445 since the inception of the program. This is exclusive of unclassified material







forwarded which was not recorded but is estimated at 1400 clippings during the period covered. Several DF's from the serviced offices have been received commenting on the value and useability of the intelligence disseminated.

The Office transcribed pertinent counter-intelligence carried in FEAF cables as well as in other reports and transmitted these to the Provost Marshal (MDEP) and Industrial Resources, Manpower Branch. Overt intelligence, as presented in the press and other publications, is reviewed daily. Pertinent clippings are forwarded, as indicated above, to interested components. News items of strategic and tactical significance are filed by ATIX for use in briefings or as background material for special studies.

The following newspapers are received and reviewed daily: New York Times, Washington Post, Christian Science Monitor, Wall Street Journal, Cleveland Plain Dealer, Dayton Journal-Herald, Dayton Daily News. As received, these periodicals are reviewed and clipped: Aviation Week, The London Economist, Colliers, The Saturday Evening Post.

Another function is the review and selection of appropriate intelligence studies for inclusion as "special articles" in the Weekly Intelligence Briefing Material, disseminated to the Air Material Areas, certain Exempted Stations and other interested activities. Sources of these special articles include studies prepared by the Departments of State, Army, Navy, Air Force, Central Intelligence Agency and the British Ministry of Defense, Subjects are selected to provide intelligence



officers with current and background information suitable for briefing Commanding Generals and their staffs.

Air Intelligence Office personnel, acting on behalf of Major Murrah S. Sturgis, ATIC Historical Officer, synthesized, edited and prepared in final form the semi-annual installment of the ATIC History.

SURVEY: In general, survey remained the same as during the previous reporting period.

From 1 July to 3 December, approximately 123 Top Secret documents, 910 incoming Messages and 5513 technical and Mon-technical documents were perused for the purpose of segregating from a mass of irrelevant material, the data pertinent to the mission of the Air Intelligence Office, ATIC, AMC, WADC and BAGR.

The daily accession list, a typewritten publication handcarried five days a week to the Technical Analysis Division, consists of items of interest screened from incoming messages, intelligence information reports and summaries. Since 1 July, approximately 1597 items have been referred to components of the Air Technical Intelligence Center.

BRIEFING: Briefing functions of the Office were considerably expanded during the period covered to provide dissemination of pertinent intelligence information of wider scope to a larger number of personnel on a need-to-know basis. This expansion of activities involved more extensive use of visual aids, including charts pertinent to the briefings. The policy of including technical presentations of specific interest to





various AMC and WADC personnel was augmented.

Requests for briefings are being received from all organizations on the base, and other installations throughout the country. To date, all such requests have been met.

In the past six months a total of 91 oral briefings were presented.

Of this total, 52 were regularly scheduled weekly presentations. These
included 26 addressed to the CG & Staff Officers of Wright Air Development Center and 26 to AMC and tenant organization division level Chiefs.

Regularly scheduled monthly briefings were given to the following:
five to variously assigned ATEC airmen, six to the Aircraft and Propulsion Lab airmen, both under the Information and Education program;
six to Navy personnel from BAGR, six to the ARDC Indoctrination School,
three to the Materials Lab of WADC, and five to AMC Procurement Officers.
In addition, two extensive briefings were given to WADC Laboratory
Chiefs. Upon request, ad hoc presentations were given the following
groups: the Wright Patterson Unit Security Officers, the Strategic Intelligence School, new ATEC employees, medical officers, the AMC Surgeon's
Office, and the AMC Commanders.

During this period, approximately 95 command conferences and division level meetings were held in the Air Room. Over half of these conferences and meetings were monitored and recorded by Air Intelligence Office personnel. Most of the conferences were transcribed for future reference by participating personnel. The security of the Air Room was maintained at all these conferences.

The Office maintained the Air Room situation maps and charts on a





7-day basis. By 1000 hours each day, postings were completed and an oral briefing prepared. This briefing covered the World strategic situation and the Korean tactical situation. ATIC and AMC Staff members, who visited the Air Room for up-to-the-minute intelligence information, were briefed on the basis of coverage desired and available.



# TECHNICAL REQUIREMENTS DIVISION (ATIR)



#### TECHNICAL REQUIREMENTS DIVISION

Technical Requirements Division provide for the necessary administrative, logistic, funding and air technical intelligence coordination with concerned agencies for the accomplishment of its assigned mission. The Division is required to organize and operate the Collection Control Branch and the Air Technical Liaison Program Branch; establish and monitor air technical intelligence collection requirements with all Air Force and associated intelligence collection activities, both United States and allied; monitor the administration of the ATLO and Foreign Scientists' Program; and monitor and participate in certain phases of the domestic exploitation program. Finally, the Division is charged with maintaining direct liaison with Air Force activities and other governmental agencies in matters pertaining to air technical intelligence. No changes were made in this Division's organizational structure during the reported period.

The Requirements Section of the Collection Control Branch was assigned the following additional responsibilities during the period covered: (a) Monitorship of the program for evaluating intelligence reports received at ATIC; (b) Acquiring, maintaining, and monitoring general air technical intelligence requirements for ATIC; (c) Monitoring





the Priority Price List of USSR Materiel; and (d) the Returnee Exploitation Group (REG) Program.

As a result of implementing action taken during the period covered, Foreign Scientist functions will be transferred from this Division to ARDC not later than 1 March 1953. The transfer originated in a letter written by the USAF Director of Intelligence to the Commanding General ARDC, <sup>1</sup> followed by a conference between representatives of ARDC, AFOIN and ATIC.

FERSONNEL: As of 31 December 1952, there were 50 civilian employees, 95 officers, and 27 airmen assigned to all organizational components of the Division. Although some inconvenience was experienced through the turnover of clerical and stenographic personnel, the majority of positions for civilian personnel have been filled, and obtaining qualified incumbents for authorized positions is no longer a major problem.

On 15 December 1952, Colonel Rolf D. Cape was assigned as Chief, Technical Requirements Division. Lt Colonel John L. Brownewell, who had been the Division chief until that time, was reassigned as Chief, ATL Program Branch, to replace Lt Colonel Charles L. Summers who was transferred from ATIC.

#### PROJECT ACTIVITIES:

<u>Project 40001</u> - Collection of ATI Information: This is a continuing project involving specific requests for information (SRI's). On 1 September 1952, there were 255 active SRI's. During the period

<sup>3</sup> PAM No. 72, 23 Dec 52





<sup>1 1</sup> Feb 1952

PAM No. 71, 16 Dec 52



covered in this history, 166 SRI's were initiated and 130 cancelled, leaving 291 active on 31 December 1952. The procedures and functions of the group are progressing efficiently and no recommendations for change are made at this time.

Project 40014 - ATT Collection Guidance Manuals: ICGM-Propulsion was completed on 25 August 1952 but was withheld after review for a chapter on nuclear energy for propulsion. This delay was believed warranted in view of the fact that this field carries one of the highest intelligence priorities. After considerable research, a paper was prepared and submitted to Dr. Perry, Associated Equipment Branch, Technical Analysis Division, for approval. The manuscript was approved and the manual forwarded to the D/I, Hq USAF, 2 October 1952.

In answer to specific "feeler" questions and requirements submitted to Mr. John S. Honaker, ATIC, on one month TDY to examine and survey USAF intelligence echelons in Europe, it was stressed that a great and immediate need exists for collection guidance instructions.

Deadline for ICCM-Fuels and Lubricants could not be met. As result of conferences held at Hq USAF, 2 December, concerning production schedules and delays on the Fuels and Lubricants Manual, it was recommended that an interim collection guidance publication be prepared. In accordance with paragraph 8, Section II, Hq USAF Intelligence Collection Instructions, a considerable amount of research was done to prepare a draft of Intelligence Collection Guidance Memorandum - Fuels and Lubricants. This was submitted to ATIA for review and approval on 24



December 1952.

Information was received from ATI that General Ackerman, Mq USAF, in a personal letter to General Garland, had expressed deep satisfaction following review of the Armament and Aircraft manuals and stated that they were considered "excellent."

Failure to meet constantly rescheduled deadlines, the constant change of project engineers, setbacks due to higher priorities of ATIA projects, and the difficulty experienced in procuring effective illustrative material, have delayed the completion of collection guidance manuals immeasurably. Because of the foregoing factors, it was impossible to complete the bulk of the manuals by the end of 1952 as originally planned. As of 31 December 1952, four ICCM's had been officially approved.

Project 40018 - Exploitation of US Domestic Sources for Air Technical Intelligence Information: This is a continuing project, carried out jointly by ATIC, CIA, and D/I, Hq USAF. There have been no major changes in the assigned function of the domestic exploitation phase of Project 40018. The following CIA status report reflects a comprehensive picture of the overall status of sources exploited through CIA during the period covered:

	Sources on Whom Requirements Were Solicited by CIA	Requirements Submitted to CIA	No Require- ments	Fulfilled or Cancelled	Still Active
CIA Cases	101	59	lala	27	91 22
REG Sources Defectors	19	15	4	0	7
Guides ATIC Contacts	_2	13	0	8	15
TOTAL	134	97	51	45	135



UNCLASSIFIED



The revision of AMC Regulation 200-3 has been fully coordinated by ATIC, CIA, and Hq AMC. This regulation covers the program for Notification of Foreign Travel reported to ATIC by USAF contractors through the six Air Procurement Districts. The results gained are most disappointing when viewed against the excellent potential for the collection of foreign intelligence represented by classified USAF contractor facilities. The efforts which have been made within the Eastern, Northeastern and Midcentral Air Procurement Districts have been gratifying inasmuch as they reflect positive action on the part of personnel charged with the responsibility of implementing the Notification of Foreign Travel Program. On the other hand, results obtained from the Southern and Western Air Procurement Districts have been negligible and indicate a lack of understanding of the purpose, importance, and implementing procedures necessary to insure success of the program. It is felt that only through direct personal contact with the procurement district security personnel will it be possible to establish the Notification of Foreign Travel Program on a firm and efficient basis.

This program will be under continued review by the Requirements Section in order to arrive at an accurate determination of its actual and potential value to the ATIC mission. When sufficient data has been accumulated to effect a meaningful report, recommendations as to the future of the Notification of Foreign Travel Program will be made to proper authorities for appropriate action.





Project 40016 - Returnee Exploitation Group (REG): In November 1952, the REG Liaison Project was established and assigned to the Requirements Section. The scope of this project is to keep concurrent liaison with the Returnee Exploitation Group in Germany, which is engaged in the interrogation of selected scientific German personnel who have returned from Soviet Russia after having worked there for a number of years on research and development projects. In September, all operational and biographical files used by REG were microfilmed and forwarded to ATIC for reproduction.

More than 70% of the sources exploited by REG have been of primary interest to ATIC, and the information obtained from the courses constitutes some of the best and most timely available information on Soviet research and development progress. The REG Liaison Project intends to utilize the REG files to assist the Technical Analysis Division in the preparation of timely SRI's to be served on REG sources of interest to ATIC, as well as in the selection of future sources which may become available to REG for exploitation.

The history of REC and the implementation of the REC Program at ATIC were presented to the CG, ATIC and will be formally presented to the Chief of the Technical Analysis Division and to key analysts.

In the implementation of the project, concurrent files on all known German scientific personnel will be established and maintained, as well as data and information on all known locations in the USSR where German personnel are engaged in research and development activities.



Studies on this research and development effort will be prepared for the Technical Analysis Division. Furthermore, close liaison in this effort will be maintained with the ATI Branch at Hq USAVE, since ATLO personnel are charged with the exploitation of REG sources of interest to ATIC.

This project will be reviewed periodically to determine its value to ATIC, and changes may be required to insure optimum utilization of the program.

Project 40021 - General Requirements (BAIR): In September 1952, the Collection Control Branch was assigned the responsibility of acquiring, maintaining, and monitoring all general air technical intelligence requirements for the Center. Such requirements reflect the types of information required on a continuing basis for the production of air intelligence necessary to the fulfillment of ATIC objectives. ATI requirements, along with other AF intelligence requirements, will be consolidated by the D/I, Hq USAF and submitted to the field via the Basic Air Intelligence Requirements (BAIR).

The publication will be used by field collection agencies as an overall basis and guide for local planning and subsequent field action.

This project was formally initiated and approved in September, at which time the Collection Control Branch took immediate steps to establish acquaintanceship between the BAIR monitor of ATIC and the BAIR monitor of the D/I. In October, a trip to the D/I resulted in handcarrying back to ATIC, final draft copies of the BAIR, thereby



affording ATIC personnel an opportunity to render a quick and final review before publication.

This review resulted in a completely revised and improved chapter on Photography, plus a series of minor additional requirements in various fields of technical intelligence. Also accomplished for inclusion into the BAIR was a revision of existing National Intelligence Survey (NIS) requirements, from the present type guidance material as now used by the producer of finished NIS studies to requirements for NIS type information for use by the field collector.

These changes were handcarried back to the D/I in November, and it is anticipated that the BAIR will be ready for field distribution in January or February 1953.

Project 40022 - Priority Price List: Numerous collection personnel overseas have indicated a very great need for a list of the most critically needed items of Russian aeronautical equipment, arranged by priority, together with an estimate of the amount of money which may be expended for collection of each item. Such a list is needed for two reasons: (a) To guide the collection specialist in allocating his efforts, or the efforts of any particular collection group, in concentrating on a specific collection potential; and (b) To permit the collection specialists to take immediate advantage of opportunities to procure items of Russian manufacture, drawings, specifications or maintenance manuals, without jeopardizing the opportunity of getting such material or information by having to query



this Center as to the maximum amount of funds that may be expended for any particular item.

This project was formally initiated and approved in September.

A priority price list was compiled and submitted to the D/I but was returned "disapproved."

The Operations Section initiated the following new projects under Project 40012 - Collection of ATI Information (General).

"Communications" - To investigate existing equipment and development, and to procure, if possible, portable long and short range ultrahigh speed signal transmitting equipment for use in intelligence collection activities.

"Special Microfilm Equipment" - To investigate, test, and procure portable miniature automatic microfilm equipment for use in intelligence collection activities necessitating the copying of documents, photographs, etc., in areas and at locations where large microfilm units are not available, or cannot be used for security reasons.

"CAMIO" - To determine and procure that combination of photographic equipment which would provide, on short notice, adequate photographic coverage for any situation which may arise.

The following projects were completed:

Project 40012 - "Immigrants to Israel" - To establish and implement a plan for the collection of information as to the whereabouts and the knowledgeability of Israeli purportedly living in Israel after deportation from Iron Curtain countries. This project was cancelled for security reasons.



Project 40016 - Collection of ATI Information (Scientific Personnel):

Dr. W. W. Kellogg - Dr. Kellogg was considered for employment for one year in Europe. This entire project was turned over to the Central Intelligence Agency for operation.

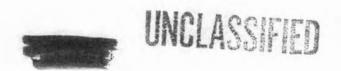
Dr. John R. Weske - Dr. Weske, a specialist in Fluid Mechanics, spent two months in Europe and prepared a Final Comprehensive Report upon his return to the US.

Dr. Marion L. Pool - Dr. Pool, a Nuclear Physics Professor at Ohio State University, toured Europe and obtained all available information and submitted a Final Comprehensive Report to ATIC upon return to the US.

Professor E. K. Weise - Professor Weise, a former "Paperclip" personality, was considered for a tour in Europe as an Electronics Specialist.

Mr. Dreyer - Mr. Dreyer, a Computor Specialist at Darmstadt
Technical High School (Germany), visited the US under the sponsorship
of ATIC. He was debriefed by the Harvard Computor Laboratory, WADC,
and ATIC. This trip helped in obtaining access to information available
at the Darmstadt Technical High School.

A study was completed to determine the best type camera to be used in photographing "unidentified flying objects." One hundred Videon cameras with difraction gratings have been ordered. A camera and lens assembly, capable of taking a picture at a distance of 17 miles, has been obtained and dispatched to the Air Attache, Turkey.





ATL Programs: The project "General Recruiting, Processing, and Indoctrination" was revised to exclude those items dealing with the training of ATLO's. These training items are now included in Technical Services Division Project 70024.

During the month of July there were 18 ATLO's in training for overseas assignment; during August, there were 20. One ATLO departed for overseas duty station during July and six departed during August. One ATLO was assigned to Strategic Intelligence School during July prior to overseas assignment and four were assigned during August.

During the period 1 September through 31 December 1952, there were 18 Air Technical Liaison Officers, one airman, and one stemographer trained for overseas assignments. During this same period, 10 Air Technical Liaison Officers, two airmen, and seven stemographers departed to overseas stations. Three Air Technical Liaison Officers were assigned to the Strategic Intelligence School prior to overseas assignment with the ATLO Program.

Air Attaches were returned to the Zone of Interior from Viet Nam Republic of Indochina, Norway, Turkey, Greece, The Netherlands, and Czechoslovakia. These attaches visited the Air Technical Intelligence Center and were debriefed by personnel of the Collection, Requirements, and Technical Analysis functions.

A policy was established between the Air Technical Intelligence Center and Headquarters, Air Research and Development Command whereby all ATLO's returned to the Center, either on temporary duty for



recrientation or on PCS for rotation purposes, would be scheduled to the ARDC Headquarters, Baltimore, for a minimum of one day debriefing.

Approval was received from the Directorate of Intelligence to implement a planned and scheduled program of reorientation of certain ATLO personnel assigned to overseas offices. This procedure was devised to insure that technical personnel in charge of specific technical fields are returned to the ZI for this purpose at the midpoint of their PCS assignments. It is intended that these TDI assignments of approximately five days will provide an adequate and accelerated program of reorientation.

Authorization was received for the establishment of an ATL Office with the Office of the Air Attache in Brussels, Belgium. One Air Technical Liaison Officer position has been established for a general engineer with the authorized grade of Major. No individual had been selected for assignment as of 31 December 1952.

A request was submitted to the D/I, Hq USAF for authority to establish an ATLO position with the Air Attache in Moscow, USSR. If approved, this position will be designated as an aeronautical engineer with authorized grade of Major.

The chart on the following page reflects authorized and assigned overseas ATL strength:





#### SEPTEMBER 1952

#### DECEMBER 1952

OVERSEAS ACTIVITIES	TEC	TECHNICAL		AIMIN, STENO & LANG SPECIALIST		TECHNICAL		AIMIN, STENO & LANC SPECIALIST				
	AUTH	ASGD	IN TNG	AUTH	ASGD	IN	AUTH	ASGD	IN TNG	AUTH	ASGD	IN
Austria	24	12	7	18	9	1	24	16	4	20	9	2
Germany	66	43	8	24	19	5	68	42	10	27	23	3
Japan*						-	2	0	0	0	0	0
Japan	9	6	0	6	3	0	8	6	0	6	2	0
Belgium*							1	0	0	0	0	0
England*	7	6	3	0	0	0	7	7	3	0	0	0
France*	6	3	4	1	1	0	7	3	7	1	1	0
Italy*	1	1	1	0	0	0	i	ī	1	0	0	0
Sweden*	1	1	0	0	0	0	1	1	0	0	0	0
Switzerland*	1	1	0	0	0	0	1	1	0	0	0	0
Turkey#	4	2	1	0	0	0	4	2	2	0	o	0

NOTE: These offices are under the administrative jurisdiction of the Air Attaches and normally the clerical personnel are furnished by the Air Attache Branch.

PLANNING PROGRAM: As part of the collection planning program, detailed general ATIC requirements for raw technical intelligence relating to atomic energy, radiological, biological and chemical warfare were obtained from ATIA, edited and forwarded to Collection Control Branch, Directorate of Intelligence, Hq USAF, in the new format entitled Basic Air Intelligence Requirements.

A staff study on the utilization of the NATO intelligence organization being formulated by a NATO Ad Hoc Committee was presented for ATIR approval. The plan proposed to establish a close coordination of Air Attaches and ATLO's with the air members of Military Assistance Groups in the NATO countries to keep the US representatives in the NATO intelligence organization informed of appropriate ATIC collection requirements



without releasing information unsuitable for foreign national consumption.

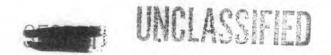
A proposal was submitted to consider use of US exchange officers for ATLO duty in England. The exchange officers, because of their knowledge of specific fields, were believed to have superior experience for service in the ATLO field.

Through the efforts of ATIR-2, the installation of gun cameras in F-66's assigned to the Fighter Squadron at Wright-Patterson Air Force Base was assured. The purpose of these installations is to provide suitable photographs during flights resulting from reports or sightings of unidentified flying objects.

Steps were taken to insure that complete and continuing information covering a wide field of subjects and sources would be automatically forwarded to ATLO's. The type of information to be furnished would include knowledge of new equipment useful in collection of technical information, references to collected information from other sources, and information assisting ATLO's in the performance of their functions.

Arrangements were completed with the Air Information Division,
Library of Congress, for the collection of Soviet biographical data
and for the fullest utilization of the Library in support of the air
technical intelligence information effort. Valuable contributions by
the Library of Congress have already been made to the air technical
intelligence collection effort.

From 1 September 1952 to 31 December 1952, staff studies were prepared on a variety of subjects calculated to advance the collection





#### effort. Following are examples of the types of subject matter covered:

- a. Plan for obtaining basic scientific data from the USSE,
- b. Utilization of national associations of the US
- c. Use of foreign chambers of commerce
- d. Exploitation of US Patent Office
- e. Collection capabilities of large oil companies
- f. Exploitation of Swiss libraries
- g. Exploitation of doctorate theses
- h. Exploitation of East German Patent Office
- i. Plan for obtaining Soviet equivalent of technical orders
- j. Idbrary of Congress capabilities
- k. Exploitation of the International Astronomical Union and related organizations
- 1. Photographic collection in the Near East
- m. Delineation of functions and responsibilities between the Library of Congress, ATIC, and Battelle Memorial Institute, and ATIC contractor
- n. Utilization of the foreign exchange program in the collection of technical intelligence information.
- o. Acquisition of MIG-15
- p. Utilization of NATO Technical Intelligence Office
- q. Exploitation of Off-Shore Procurement

Extensive work was done in connection with the open literature survey, especially in regard to delineating the extent of commercial contractors' participation in the program.



UNCLASSIED

Numerous personnel, ATLO's, Air Attaches, and others returning from overseas assignments were debriefed, practical field problems discussed, and pertinent information on specific subjects for collection brought to light.

Arrangements were made for ATIC to obtain technical documents on a 45-day loan basis from Foreign Exchange Branch, ARDC, whenever they obtain documents through foreign exchange procedures.

In general, excellent progress was made during this reporting period in collection plans and in the delineation of air technical intelligence requirements. Of special note is the fact that relations and
cooperation with the CIA, Library of Congress, AMC, and ARDC activities
have greatly improved.



# TECHNICAL SERVICES DIVISION (ATIS)

UNCLASSIFIED



#### TECHNICAL SERVICES DIVISION

ORGANIZATION AND FUNCTIONS: The functions of this division are to provide plans for the development and implementation of the Center's document processing program; to develop and implement plans for the indoctrination of selected military personnel in the administration of ATIC field activities; to administer a special document research program; to receive, store, classify, catalog and ship certain foreign equipment. The division also provides special-purpose equipment and supplies to authorized claimant agencies participating in ATIC activities, either within the US or in foreign areas; provides office equipment and supplies to ATIC personnel; and operates a Flight Operations Office for the Center.

Due to increase in personnel, workload, and additional administrative requirements placed upon Graphic Services & Reproduction Section, the following organizational changes were accomplished to reduce the toolengthy span of control; (a) a Visual Aids Unit was established to meet the expanding visual aid briefing requirements for ATIC; (b) an editorial clerk was designated as supervisor of the make-up unit; responsibilities involved are to maintain a more rigid control, recording, and assignment of specific projects in order to accomplish a necessary production increase.



- UNCLASSIFIED

Responsibility for sensitive, or "X" documents, formerly controlled by Registered Documents Section (ATIMA-3) was transferred to Document Processing Section.

Personnel: During the reporting period, Lt Colonel Elmer T.

Harshbarger was assigned as Chief of the division vice Major Walter

D. Leach, who reverted to inactive status Capt Clarence R.

Glasebrook was relieved as Chief, ATI School Group and assigned as

Chief, Plans and Operations and Administrative Office and subsequently placed on TEN to Washington, D.C.4, this TEN continuing as the reporting period ends. 2nd Lt Robert M. Olsson was relieved as

Administrative Officer and reassigned to the Technical Analysis Division Major William D. McGarey returned from the Near East Seminar at the

American University, Beirut, Lebanon and was assigned as Deputy Chief,

Technical Services Division Captain Douglas Davis was assigned additional duty as Acting Chief, Flight Operations Office, during the temporary absence of Captain Glasebrook .

1PAM-71, 16 Dec 52

<sup>2</sup>Par 6, SO 194, Hq 1125th F/A Gp (ATIC), 10 Dec 52

3PAM-47, 26 Sep 52

410 1233, 28 Nov 52, and LO 0001312, 22 Dec 52

5PAM-48, 2 Oct 52

610 0000717, 12 Jun 52

7PAM-49, 8 Oct 52

8PAM-62, 24 Nov 52



Military strength authorizations are unchanged. Civilian authorization was reduced by cancellation of four positions, in response to the request of the Comptroller<sup>9</sup>.

In an attempt to correct several malassignments and improve the services offered by the Document Processing Section to the analysts of the Center, several personnel transfers were effected. Major George K Kudravetz was appointed Acting Chief of the Section, as an additional duty, while the Chief of the Routing and Control Group was temporarily assigned the responsibility of supervising the Repository.

Captain Robert G. McCulloch was relieved of his responsibility as Chief, Biographic and Facilities Group in order to serve as Administrative Officer in the branch office.

PROJECT ACTIVITY: This period marked an acceleration of the effort to improve procedures in the Document Processing Section (ATISD-1). Major Hopkins, Chief of the Document Services Branch (ATISD) instituted a series of discussions among users of the Section's services, employees at the work level, and supervisors, which covered the steps in document handling, the forms used, and the status of work loads. Recommendations made by these groups were adopted and production figures for ensuing months proved the innovations worth-while.

Statistics compiled during the reporting period by the groups concerned with processing and dissemination of documents showed production increases of from 25 to 32 per cent over the comparable 1951 period. Following further implementation of revisions planned for the locator card filing system, and employment of personnel to fill existing vacancies, 9DF, Subj: "Manpower Distribution" to ATIS from ATIN, dtd 4 Dec 52



it is anticipated that backlogs in that unit can be substantially reduced.

Procedural changes recently inaugurated in the Repository, as well as better utilization of personnel, space, and equipment, are being reflected in the more effective service provided by this activity. The reference library of Soviet books and periodicals, established about a year ago with a collection of about 20 documents, has outgrown its allotted space. This unit has acquired and cross-indexed 1300 USSR publications.

Through decentralization of other offices on Wright-Fatterson Air Force Base, Document Screening Group (ATISD-2A) was enabled to fill its authorized complement of civilian personnel. As a result, the number of documents screened and routed has increased from 6600 to 8600 per month during this reporting period.

The assignment of these additional specialists also made possible the planned assignment of specific fields of responsibility to screeners; e.g., certain screeners were made responsible for examining documents for information of interest to the Electronics Section of the Technical Analysis Division; others were charged with searching for data required by the Aircraft Section; still others screen for information of value to the Associated Equipment Section.

This arrangement has proved effective in that it narrows the scope of responsibility of the screener, thus permitting him to operate more accurately and in greater detail. This plan further provided closer





liaison between analyst and screener.

Responsibility for distribution of the Subject and Country Code Book was transferred to Document Screening Section. The changes, additions, and deletions suggested by the analysts in the Center were considered for incorporation into the revision of the subject matter code made by ATISD-2A during the previous reporting period and action was taken to have the completed index published and distributed.

The system of recording and filing data in the Biographic & Facility Data Register had long been recognized as inadequate. During Movember and December these records were completely revised. This revision necessitated a survey of subject matter breakdowns, the reviewing and refiling of more than 45,000 information data cards, and rearrangement of all reference books and folders. Subsequent usage determined that the revised system provided easier access to desired information and subject matter categories.

A major problem - the staffing of the Translation Unit with competent technically trained translators - was solved by employment of three civilian translators. These employees were made available through deactivation of another translation group on this Base.

Addition of these translators was especially timely, as several military language specialists were transferred from the Center, and no translation contract existed during this period. With the translators now available, the Division is prepared to translate 12 foreign languages; Russian, German, French, Spanish, Polish, Swedish, Italian, Serbo-Croatian, Czech, Norwegian, Portuguese, and Bulgarian.





Most of the authorized positions in Reproduction and Graphic Services Section have been staffed during the past four months. However, increasing demands for the services provided by this Section make it impossible to produce the quality of work desired in the volume required to fulfill all obligations. There has been added emphasis on management charts of various types, and many man hours have been spent in development of suitable charts. No determination has yet been made as to the charting system which will best meet the needs of the Center.

Recent months have shown a noticeable improvement in the quality of reproduction work. This has been accomplished through closer supervision and attention to details. Greater effort has been exerted to improve the facilities of the Section, with the result that several pieces of equipment have been added.

It is planned to continue the studies and surveys of procedures, personnel assignments and record revision, conducted during the reporting period to meet unsolved problems. One of these is the physical separation of Repository personnel and the request clerks in the Document Processing Section. It is expected that within the next several months additional floor space will become available permitting the Repository to move into the hangar with personnel whose work is closely related.

A serious problem existing in the Document Processing Section is the forced suspension of the 10-day follow-up program, a highly satisfactory method for controlling documents routed through the Center. As no civilian positions had been established to accomplish the work involved, airmen



were utilized. This arrangement was unsatisfactory due to the temporary nature of military assignments. Every effort will be made to have civilian positions authorized so that the 10-day follow-up system can be resumed.

A new document data form (ATIC Form 475) was introduced and implemented by an Office Instruction (11-5). A 5-part, 3-color, snap-out, carbon interleaved form, it is designed to expedite the handling, processing and recording of incoming documents. Considered very superior to its predecessor, ATIC Form 75, its chief advantage is that it permits one complete master record of action taken on all documents received and processed in the Center.

The subject and country codes used in identifying incoming documents were revised and limited distribution made for coordination.

After coordination, in September, distribution of the approved subject
and country codes was made to personnel of the various technical offices
and interested activities of the Center.

In accordance with revised Directorate of Intelligence Office Memorandum 200-7 and verbal instructions from representatives of the D/I, the system for requesting documents from Hq USAF has been revised and approved. AFHQ Form 0-228, "Specific Request for Information", is prepared instead of DD Form 96. A special series of reference control numbers is used - WRC - when requesting known documents from Hq USAF.

ATIC Form 479, "Locator Card for Foreign Language Documents," was designed, approved, reproduced, and received for use in the identification





of foreign language documents as of 13 August 1952.

Microfilming and destruction of 108,000 reference locator cards
has been completed. These cards consisted of the AF series 1 through 343,999,
CIA records for 1949, discontinued author files, translation reference file
for 1948-1949, and miscellaneous Air Attache records for 1949.

Screening handbooks were prepared and each of the screeners provided with a copy. These handbooks consist of fully tabulated information for the screener's use in coding and routing, together with the continuing and short term analyst requirements.

The receipt from the contractor of a Russian-English aeronautical dictionary marked the completion of a special project initiated in December 1951. This dictionary, which is on 3 x 5 cards alphabetically arranged, provides a man-hour saving means of determining the correct translation of current aeronautical terms.

In the compilation of biographical and facilities data, 4593 documents were reviewed during the last six months of 1952. From these and other sources, 663 personality folder files were prepared and integrated into the register. Complete reports on 168 research and development facilities were prepared and filed. A total of 22,650 personality and facility data cards were incorporated into the register. Technical Analysis Division analysts were provided with 105 complete dessiers on personalities and facilities.

More than 100 selected military personnel, including officer and airmen air attaches, ATLO's and air technical investigators, received



specialized training in the fundamentals of photography and in the various photographic media applicable to the collection of technical intelligence. These included 15 officer Air Attaches, 10 airmen, 27 ATLO's and 37 investigators.

Photographic research was carried on to determine inexpensive equipment by which photographs of unidentified flying objects and possible radiant energy therefrom could be recorded in silver or dye densities in the form of a spectral image with a single exposure.

Also conducted was a survey of available film emulsions and sensitometric studies to determine the film and developer combination with characteristics most suitable for recording a usable spectral image of unidentified aerial objects.

An optical system for laboratory testing of replica diffraction gratings was fabricated under simulated practical usage for an infinite object. Using this system, 100 replica diffraction gratings were tested to determine photographic effectiveness.

A technical report entitled "A Fine Grain 35-mm Low Contrast High Speed Film Emulsion Developer Combination", was prepared as a result of extensive research and experimentation. The report showed that the effective emulsion speed of Kodak Super XX could be increased two to four times.

The Orientation and Indoctrination project continued to show progress. A part of this progress is devoted to sirmen assigned to the Center who are given an "Information and Education" course. This function was delegated to the Center by the Base.



At Lowry AF Base, Colorado, 185 officers were given ATIC orientation as part of the Officer's Air Intelligence Course. Eighty-five officers were oriented at Eglin AF Base, Florida, Another briefing was conducted in Washington for personnel newly assigned to the Directorate of Intelligence.

Division personnel monitored the protocol visits to the Center of Air Vice Marshal Fressanges and Air Commodore Waite, both RAF officers. The formal orientation of new ATIC employees was conducted on 25 November on behalf of 11 officers, nine airmen and 45 civilians.

As part of the Security Consciousness program, 227 posters were designed and posted. Twenty-five security pamphlets also were distributed. Security briefings were given new Center personnel as well as ATLO and Investigator trainees. More than 200 tests on AFR 205-1 were administered.

Other security reminders utilized during this period were the "Security Consciousness Thought for Today" in the ATIC Daily Bulletin, two large illuminated posters, broadcasting of security slogans over the public address system, a security talk to all ATIC personnel and a sign denoting the number of days since the last security violation.

A new feature of the Security Consciousness program was devised and implemented. During the day following a security violation, a red star is displayed on the desk of the offender and a picture of Stalin and the symbol of the branch in which the violation occurred posted in a conspicuous place.



The Division received and cataloged 1100 new items of foreign equipment. A considerable portion of the equipment is on display and has been viewed by distinguished visitors, reserve officers and air attaches. Sixty shipments were made to contractors and other agencies. Two other projects are associated with this operation, covering the collection of data on Soviet name plates, markings and numbering.

During this period approximately 400 pieces of correspondence were processed pertaining to the Joint Materiel Intelligence Agency (JMIA) function. This required constant liaison with the technical sections regarding the exploitation of foreign, equipment and dissemination of pertinent reports. This was in addition to the dissemination of information regarding equipment obtained by other services or agencies and the requests to these agencies for additional exploitation and reports.

The (UAL) Unit Allowance List was processed, requiring a complete inventory of all items of equipment at ATIC and ATIL offices at USAFE, USFA and FEAF, as well as a listing of equipment contemplated.



# TECHNICAL ANALYSIS DIVISION (ATIA)

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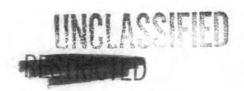


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#### TECHNICAL ANALYSIS DIVISION

FUNCTIONS: The functions of this division are to produce finished air intelligence; to assemble and maintain working files of technical and scientific data essential to accurate continuing appraisal of foreign aeronautical equipment; to provide such basic data on foreign air weapons and related material as necessary to the preparation of recognition manuals and performance handbooks; and to produce technical reports of observations of unconventional aircraft, missiles or of such other airborne objects as might indicate an advance in technological knowledge by a foreign power.

The operations of the Division were more specifically defined in D/I USAF Office Memo, Number 22-5, dated 30 September 1952. The Memo stipulates that the functions of this division are to produce finished air technical intelligence; specifically, to analyze research and development, design and construction, processes of manufacture and performance of ground and airborne weapons and material pertinent to air operations of foreign nations in order to meet ATIC mission objectives and satisfy all using agencies; to assemble and maintain working files of technical and scientific data essential for a continuing appraisal of the capabilities of foreign aeronautical equipment;





to maintain liaison with other governmental agencies on air technical intelligence matters pertaining to the production of oral or written reports, briefs, estimates and studies necessary to fulfill Air Force Intelligence requirements; to provide basic data on foreign air weapons and related material necessary to the preparation of recognition manuals and performance handbooks; to prepare air technical intelligence publications as required; to compile data on certain aspects of atomic energy, and biological and chemical warfare. BW, CW and AE will be limited to technical considerations related to weapons development such as atomic power plants and the incorporation of warheads with the vehicle. Excluded are EW and CW agents and nuclear material.

ORGANIZATION: The Special Studies Office (ATIA-4) was abolished during this reporting period. As of 31 December, three offices remained: the Administrative, Plans and Operations, and Technical Advisor. The division, in addition to the offices, consists of three branches: Aircraft and Propulsion (ATIAA); Electronics (ATIAE), and Associated Equipment (ATIAS).

Pending at the conclusion of the reporting period was a proposal to reorganize this division to effect a more equitable distribution of the work load among the Division's three Branches. A Staff Study, dated 24 December, was prepared which recommended certain organizational changes and which was subsequently endorsed by the Commanding General.

Analysts are divided into three Branches: Aircraft and Propulsion (ATIAA);







Electronics (ATIAE); and Associated Equipment (ATIAS).

PERSONNEL: On 11 December, Colonel Ray W. McDuffee, Deputy Chief<sup>1</sup>, replaced Colonel Donald L. Bower as Chief of the Division<sup>2</sup>.

The inability to staff certain civilian technical positions during the period covered was of particular significance to the production of specific intelligence end products. In a continuing effort to overcome this deficiency, many applications were reviewed; but only one technical position was filled during the last six months of the year.

Following is a list of Air Technical Intelligence Specialists
for whom the division was recruiting at the end of the reporting
period: Aircraft, Guided Missiles, Aircraft Accessories Systems,
Turbojet Power Flants, Reciprocating and Compound Power Plants, A/C
Instrument and Navigation Equipment, Bombing Systems, Anti-Aircraft
Artillery, Manufacturing Methods, Nuclear Physics, Communications,
and Electro-Nuclear Systems. An Aeronautical Engineer also was listed.





<sup>1</sup> Par 4, PAM No 53, 16 Oct 52

<sup>2</sup> Par 1, PAM No 69, 11 Dec 52

ACTIVITIES: Quantitatively, the figures below summarize project activity for reporting period.

	Active 1 July	Initiated 1 July to 31 August	Completed 1 July to 31 August	Cancelled 1 July to 31 August	Active as of 31 August
Aircraft & Pro	50	3	2	0	51
Electronics Associated Equipment	17 17	3	1 2	0	17 18

	Initiated 1 September to 31 December	Completed 1 September to 31 December	Cancelled 1 September to 31 December	Active as of 31 December
Aircraft & Pro	4	7	0	48
Electronics Associated Equip- ment	3	1 3	0	19

The following ATIC publications and other end products were issued in the cited technical fields during the six months covered:

Ai	reft & Pro	Electronics	Asso Equip	Total
ATIC Studies	9	1	6	16
Technical Reports	6	1	3	10
Preliminary Reports of Foreign Equipment	4	1	i	6
Air Intelligence Diges Articles	it 8	10	6	24
Technical Briefs	100	32	104	236
AF 112's	0	2	1	3



PROJECTS:

STATUS OF THE TECHNOLOGY OF ARCRAFT METALLURGY IN THE USSR: Four sections have been prepared in rough draft, edited and approved by the monitor. Other sections are nearing completion; however, due to the volume of work, unanticipated at the time the project was initiated, the estimated completion date, 31 December, was not met.

ed by Armour Research Foundation under contract and at an estimated cost of \$49,999. Rough draft copies of reports on four guns were received by ATIC on 26 September. Coordination within the Center was completed and recommendations for changes forwarded to the contractor 13 November. A Purchase Request was initiated 8 December to extend the basic contract to provide \$1400 in additional funds.

Due to delays resulting from re-negotiating a new contract by Procurement Division, and a change in the project plan to require printing by ATIC, it has been necessary to re-schedule the deadline date at various times. Present plans anticipate final distribution on 27 January 1953.

Importance of the Project: To analyze and evaluate the following Soviet aircraft weapons including their components, sub-components, and accessories:

- a. 7.62-mm aircraft machine gun, SHKAS
- b. 12.7-mm aircraft machine gun, BEREZINA
- c. 20-mm aircraft automatic gun, SHVAK
- d. 23-mm aircraft automatic gun, VYA





Such analyses should indicate operational and performance characteristics, assembly and disassembly, and the efficiency of each weapon when oriented in various positions around the bore axis.

SIGNIFICANT PRODUCTION FACTORS IN THE MANUFACTURE OF MIG-15 AIR-CRAFT: Reproduction and distribution of this study were completed 26 August 1952 and the project closed 2 September. Delay between the date of approval by D/I and completion of project was occasioned by the poor quality of reproducible illustrations furnished by the contractor. It was necessary for Graphic Services to re-touch all illustrations to make them acceptable for final reproduction.

INVESTIGATION OF COMPROMISED A-1C G.B.R. SIGHT: The project was delayed due to lack of a satisfactory financial arrangement between the contractor, sub-contractor and Air Force. It was further delayed by preparation of the contractor's report in a format unsuitable for direct reproduction as an ATIC Study. Revision of the project was necessary 18 July. Approval was received from D/I on 22 August for distribution which was accomplished 3 November. Project was closed 26 November.

Importance of the Project: The project was initiated to determine the degree of compromise of the A-IC G.B.R. Sight, installed in an F-84 which landed in Gzechoslovakia 8 June 1951. As a result of this investigation it was concluded that no thorough engineering analysis of the sight and its components was made by foreign personnel; however, it is possible that sufficient information was obtained by foreign personnel to promote a similar design.







UNVESTIGATION OF FOREIGN FIRE CONTROL EQUIPMENT: This project was initiated to obtain technical analyses of various items of captured foreign fire control equipment. Material included English translations of technical publications, other written matter and physical items of equipment. Emerson Electric Mfg Co was originally awarded the contract through the end of July. This contract was subsequently extended through 31 December. A report was received from the contractor 5 November analyzing the YAK-11 gunsight system. Since format of the report was not acceptable for reproduction as an ATIC Technical Report it is being considered as a Center rewrite.

A Call Letter was forwarded to the contractor 30 September for analysis of the method of gun installation and cones of fire of all turrets of the Soviet TU-4 bomber, based on the characteristics of two Soviet 23-mm NS automatic guns installed in all turrets.

Another Call Letter was forwarded from ATIC 25 August requesting analysis of selected technical and descriptive documents pertaining to the Soviet A-1 Fighter Gunnery Trainer. Since the reports contained notations in foreign languages and contract with Emerson Electric Company did not include translations - it was requested, 7 October, that Procurement Division solicit a proposal from contractor to cover the required translation services.

Importance of the Project: Results of analyses and evaluation of the material will be presented by the contractor in the form of a study containing a detailed description of the material. The study will summarize results of the analyses in terms of performance capabilities





(such as accuracy, reliability, and ease of maintenance) under simulated operational requirements. These requirements will include effects of temperature, altitude and climatic conditions.

EVALUATION OF 37-mm N & NS AIRCRAFT GUNS BY CONTRACTOR: A technical report was received 24 October and immediately released to Graphic Services and Reproduction Section for production. Distribution of these copies was accomplished 2 December. Since the current distribution only partially meets this requirement, the project will be kept open until the remaining copies, obtained through local printing, are distributed by Documents Processing Section. Estimated completion date has been advanced to 5 January 1953.

MATERIALS APPLICATIONS IN THE MIG-15 AIRFRAME: The contractor's technical report was received by the Center early in October. It was reviewed by the Project Monitor and revisions to certain portions forwarded to the contractor 24 November for final reproduction.

critical Production Factors in the Soviet Precision industry: Project was deferred indefinitely on 24 October. This deferment was necessary to enable the monitor to successfully complete other priority Branch projects. Considerable information obtainable from these priority projects is to be used in the compilation of data for subject project.

EVALUATION OF FOREIGN LANDING GEAR SHOCK STRUTS: Phase I reports on the YAK-11 and MIG-15 landing gears and the Phase II report on the YAK-11 gears have been received. Contractor has stated that the MIG-15 Phase II report should be completed by 30 January 1953.





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STATUS OF SCVIET CERAMICS AS APPLIED TO AIRCRAFT: Arrangements were made for the release to the contractor of information available in Headquarters. USAF. A Quarterly Status Report on progress was received from the contractor in October. Necessity for revision of due dates of the project became apparent at that time. New estimated date for distribution of the study was advanced to 20 May 1953.

STATUS OF SOVIET SYNTHETIC RESINS AS APPLIED TO AIRCRAFT: A preliminary report was received from the contractor in October and the information it contained was considered significant enough to warrant its publication as an ATIC study. Coordination copies of an ATIC Study entitled "Preliminary Report: An Estimate of the Status of Soviet Aircraft Plastics Technology" was submitted through channels for internal coordination on 19 November.

SOVIET ANTI-FRICTION BEARING INDUSTRY: Internal ATIC coordination of this study was completed 8 December and forwarded to D/I, USAF, for information and coordination. Due to the fact that the receipt of certain information from Air Targets Division took considerably longer than estimated, the deadline date for distribution was advanced to February 1953.

AIRCRAFT RUBBER TECHNOLOGY IN THE USSR: The basic study has progressed to the stage where all of the technical information has been assembled in draft form. Dr. Stephen Palinchak, of Project Stork, and ATIC personnel reviewed this material at the Center, 19 December, and collated it for reprinting. Summaries and conclusions will be rewritten or rearranged.





SOVIET CAPABILILITIES IN AIRCRAFT INSTRUMENT MANUFACTURING: ATIC requirements for the analyses and evaluation of selected Soviet precision aircraft instruments were outlined as a Project Stork proposal. This Stork activity was reported in full operation as of 29 August. The contractor is contacting manufacturers with a view to having analyses made. One sub-contractor, the Sperry Gyroscope Division, Sperry Corporation, is well advanced and achieving excellent results. Another sub-contractor, the Kollsman Division, Square D Corp, is becoming operational. Progress on the part of both of these Project Stork sub-contractors is considered satisfactory.

Importance of the Project: Project was initiated for the purpose of estimating the status of the Soviet aircraft instrument industry and to predict future Soviet capabilities in their manufacture. This particular study will contribute to a future overall study aimed at estimating current and future Soviet capabilities to produce quality general precision instruments in quantity.

STATUS OF THE NUCLEAR REACTOR PROGRAM IN USSR: A Project Stork proposal was submitted on 11 July outlining ATIC requirements in this field of specialization. As a result of trips in November to General Electric Company's ANP Project, Lockland, Ohio; the Oak Ridge National Laboratory's ANP Project at Oak Ridge, Tennessee, and to CIA, AFOIN-2 and AFOIN-3 in Washington, recommendations to implement this project were made. Action regarding these recommendations was withheld pending the outcome of a proposed ATIC, D/I and AFOAT-1 meeting to determine



the scope and extent of the ATIC Atomic Energy program, which has not been too clearly defined.

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Importance of the Project: The project was initiated to determine if a basic research pattern, comparable to that in the US, is
in existence in the USSR in the field of materials and supporting
sciences, which may eventually lead to a successful development of
a nuclear power plant either for aircraft or guided missiles; and,
if such a pattern does exist, to determine its' overall activity, scope,
and current level of reactor technology and status of such an enterprise.

SUMMARY OF NEW DEVELOPMENTS IN FRENCH AIRCRAFT GUNS AND ROCKET LAUNCHERS: A proof copy of ATIC Study "New French Aircraft Guns and Related Ammunition" was forwarded through ATIC channels for internal coordination on 16 October. This study was returned on 10 December for preparation of coordination copies and transmittal to AFOIN-2. Due to delays, occasioned by necessary revisions, the completion date was advanced to 23 February 1953.

ATIC CONTRIBUTION TO PROJECT HOPE CHEST: The basic approach to the problem has been written; kinds of information needed for US research and development have been selected. These must be coordinated with R & D agencies. Some effort has been expanded in developing indicators of the information categories selected in the guided missile field. A meeting concerning this project is scheduled for 5 January 1953.





Importance of the Project: To contribute a paper concerning the basic orientation or approach to the USAF intelligence problem with respect to the USSR, and to determine the following: the relative value of the types of information needed for USAF R & D guidance with respect to the USSR; the relative value of sources; and the relative value of techniques (photo recon, etc.) in acquiring the information.

MATERIALS AND METHODS ANALYSIS OF SOVIET 23-mm NS AUTOMATIC AIR-CRAFT GUN: Project Stork negotiated with Armour Research Foundation to perform this analysis. The following items are considered functionally critical and are the subject of the analysis: (1) main recoil spring; (2) barrel; (3) link guide and stripper; (4) cam surface of the bolt head and body; (5) feeder cam ("pork chop"); (6) receiver (7) ammunition link; (8) projectile core.

Importance of the Project: At the present time little is known of Soviet practice concerning the manufacture of aircraft weapons. The 23-mm NS gun can be considered largely representative of Soviet practice in this field since it is used in the MIG-15 aircraft. This project was initiated to conduct a materials and methods analysis of selected components of the Soviet 23-mm NS Automatic Aircraft gun.

MATERIALS APPLICATIONS IN SOVIET AIRFRAMES AND ENGINES: Instructions to proceed with the project were received following approval by the CG, ATIC on 16 December. A report giving AMFR weights and weights of engines will be submitted by Aircraft and Propulsion Branch o/a 1 March 1953.



Importance of the Project: A Disposition Form, dated 31 October, outlining the project was forwarded the Center from AFOIN-3,
requesting gross amounts of aluminum, magnesium, steel, cooper,
critical alloying elements, rubber and plastics required to build
certain specified airframes and engines.

The D/F referenced stated, in part: "The determination of materials input requirements for Soviet airframes and engines is of considerable interest to this office. In an analysis of economic capabilities, the relationship between the availability of basic and critical materials and the requirements of an industry is of primary importance."

RUBBER PARTS HAVING A SIGNIFICANT EFFECT ON AIR WEAPON PERFORM-ANCE: Distribution of this ATIC Technical Report was accomplished and the project closed 21 July.

SOVIET METAL AND ALLOY COMPOSITIONS, PROPERTIES AND APPLICATIONS: Following approval of this ATIC study by D/I, USAF its publication was completed and distribution accomplished 11 August.

AN ANALYSIS OF STALIN PRIZE AWARDS: Rough draft of study has been presented to the Aircraft Group for comments. Upon receipt and evaluation of comments the study will be prepared in final form for coordination.

Importance of the Project: To provide a basis for proper aircraft and propulsion-unit identification. An analysis of the various Stalin prize awards made to the aircraft and the aircraft engine





designers will provide analysts with a means of assigning unit designations with a high degree of probability. Preliminary investigation disclosed factual information on some aircraft and power plants from this source.

SOVIET ROCKET POWER PLANT DEVELOPMENTS: Requests for information to firm up and expand newly received data have been submitted to attaches in England and France.

Importance of the Project: ATIC studies on rocket and pulsejet power plants provide a development history in various countries, including the USSR. These data enable ATIC to evaluate the USSR future capability to condust aerial warfare insofar as rocket and pulsejet engines are concerned.

HANDBOOK OF USSR CRUDE OILS - PART I - AVIATION FUEL BASE STOCKS:

The initial phase of this handbook - the collection of data and the preparation of rough draft copy - was initiated during the reporting period.

Importance of the Project: This information is necessary to determine to what extent particular refining processes may be carried out by the Soviets in an effort to meet their requirements for avaiation gasoline, jet fuels, lubricating oils, etc. These data will assist in making an overall estimate of possibilities within the scope of the Soviet Union.

STUDY OF CHARACTERISTICS OF ALL KNOWN RADIO FREQUENCY SIGNALS
OF ALL COUNTRIES: The project was initiated at the request of the



Electronics Branch. The final report presents in tabular and graphic form the principal characteristics of electromagnetic radiations of the radar, radio navigation, telemetering, missile guidance, atmospheric sounding (pulse type only), and radio communication (pulse type only) electronic equipment of all countries of the world. Data is crossindered in tabulations by radio frequency, by pulse repetition frequency, and by designation. Haller, Raymond and Brown, Inc., was awarded a contract to compile the information into report form. The final report "Electronic Equipment Electromagnetic Radiation Data", dated 5 August, contains 636 pages of information value to organizations engaged in countermeasures intelligence, research and development, etc. Distribution of this report was completed on 10 October.

PROJECT 20024 - CLASSIFIED PROJECT (See also TOP SECRET History Supplement): On the investigation and development of new methods of technical intelligence in the field of guided missiles, the new contract established with Haller, Raymond and Brown, State College, Pennsylvania, has indicated significant developments. Among the more important are:

- a. A handbook covering procedures for intercept operators, prepared and distributed to USAFSS.
- b. The study of machine methods in analysis of voice communication is progressing and significant results have been disseminated.





c. Consultant services with USAFSS continued. Personnel from USAFSS visited the contractor and arrangements were made for an extensive training program for signals analysis personnel. The training will commence 12 January 1953.

Discussions with the Flight Research Laboratory, WADC, regarding statistical applications were continued. Data were furnished for the trial of several methods for the computation of probable signal source locations through the use of computing machines. The services of the Princeton University Group were obtained for the purpose of aiding in experiments to localize important sources of errors in electronic reconnaissance data. These experiments are expected to be carried out with the cooperation of Air Proving Ground Command.

Liaison with Wright Air Development Center continued during reporting period. Among more important projects included were:

- a. Installation and fabrication of special crystal video receiving equipment in a special application for USAF aircraft. Tests performed by ATIC indicated the equipment is suitable for the intended application.
- b. The exchange of technical data on new methods in analysis of special type signal intercepts. These methods are intended to influence present and future designs of electronic counter measures equipment.
- c. Coordination and dissemination of "Della-Rosa" results is continuing.



Laboratory Analysis - New methods for the incorporation of especially constructed Nomographs in analysis of signal intercepts were
reported. These new methods depend upon another new technique recently devised for determination of signal strengths of radio frequency transmissions. Results of these efforts have been disseminated
to WADC and SAC.

Analysis of Constant Errors in Radio Direction Finding - A revised method for analysis of radio direction finding bearings, where a constant error is involved, is reported. This method, still being developed, has not been experimentally tested, but such plans are proposed. The importance of analysis methods of this type has been disseminated to research and development commands.

Participation in J/SE Activities - Participation in activities of the Joint Signal Evaluation and Analysis Subpanel, Joint Electronic Warfare Panel, continued. During this period, liaison was established with the Army-Navy Electronic Evaluation Group (ANEEG) and also with the Central Intelligence Agency (CIA). Personnel attending the regular monthly meeting of the J/SE will also visit ANEEG and CIA.

SOVIET RADAR PERFORMANCE AGAINST ALLIED (US) AIRCRAFT: This project was initiated on 24 August. The desirability for this type of information had been recognized by ATIAE for some time and limited estimates of Soviet radar coverage diagrams, maximum detection range, radiation beam width, etc., brought about the initiation of the project.





The principal difficulty encountered was that of determining the radar echo area of selected US aircraft at 73 Mc. This was overcome by model measurement of echo area by a contractor, Ohio State Research Foundation, and was accomplished by coordination with the Aircraft Radiation Laboratory of ARDC, using an already existing ARDC contract, by addition of \$20,000 of ATTC funds.

Echo area measurements were made of models F-84, F-86, B-36, B-47, and B-50 aircraft, these being of most importance to SAC. A final report of the estimated performance of Soviet 73 Mc radars "PEGMATIT".

"RUS-2," and "DUMBO" against the above mentioned aircraft was prepared.

Distribution of this study, "Estimated Performance of Soviet Radar,"

was completed on 8 October.

At the request of ARDC, several echo area measurements of a model MX-1626 aircraft were made. The model aircraft echo area measurements made for this project are also useful to research and development projects, as no suitable measurements had previously been made in the 73 Mc band. The only work remaining to be accomplished by the contractor is that of preparation of final reports on the F-86, B-47, B-50 and MX-1626 aircraft.

Project Blue Book: The months of July and August brough an altime high in the number of unidentified flying object reports received by ATEC through channels. More than 500 were received during this two-month period. Public curiosity necessitated a press conference and this was held on 20 July with Major General Sanford in charge.





ATIC representatives were present to answer specific questions.

During the last four months of 1952, the number of such reports fell from a high of 56 per day to an average of about one per day. This decline probably has been due to the cessation of interest in the subject by the press. The reports that came in, however, generally could be classed as "good" and required more time for analysis.

The Monthly Status Reports, discontinued during the summer of 1952, due to the heavy influe of reports, were resumed in the Fall. Reports for the months of October, November and December were written and are in the process of being coordinated.

A conference was held with Major Fournet, D/I Liaison Officer for this Project. Trips were also made to Maine, New York and California to investigate flying object reports. To date, 100 Videon stereoscopic cameras, equipped with diffraction gratings over one lens, have been procured and received at ATIC. The distribution of these cameras is awaiting coordination with AACS and Air Defense Command. It is proposed that they be placed in certain control towers and radar sites in the US.

THE SCVIET YAK-11 AIRPLANE: A technical report has been disseminated in accordance with the distribution list set up by ATIC, 14 November, and the project closed.

SCVIET SURFACE-TO SURFACE GUIDED MISSILES, 1000 NAUTICAL MILES MINIMUM RANGE: Study draft was revised to incorporate changes which were indicated by recent intelligence information and further analysis. Study is currently being re-reviewed within ATIA and ATI.





DESIGN AND PERFORMANCE ANALYSIS BY LYCHOMING-SPENCER OF SOVIET RECIPROCATING ENGINES: "Soviet AM-42 Aircraft Power Plant Performance Characteristics," was prepared and distributed 16 November. On 8 December, a trip was made to the contractor to substantiate the proposed program for the dynamometer testing of the ASh-62 IR and the VK-107A, Soviet aircraft engines.

FOREIGN AIRCRAFT ENGINE CHARACTERISTICS SUMMARY HANDBOOK (USSR):

Final coordination of the handbook sheets has been accomplished. All

the necessary art work is in the Graphic Service and Reproduction Sec
tion for preparation of reproducible copy. Upon completion of art work,

reproduction and distribution will follow.

ENGINES - FRIENDLY NATIONS AIRCRAFT HANDBOOK: A PIF scheduling this project has been written and approved. Turbojet engine work sheets on friendly foreign nations have been completed in rough draft form. All work sheets covering pulsejet and ramjet engines have been completed with the exception of the Leduc Engine which will be accomplished as soon as supplementary information becomes available from WADC.

RE-EVALUATION OF MIG-15 BASED ON CAPTURED COMPONENTS: The contractor's final technical report is approximately two months behind schedule and will not be received in ATIC before 10 January 1953. The contractor has submitted the final report on the rough stock bill of materials of the MIG-15 and the report is being prepared for distribution. The two MIG-15 intelligence studies, the RD-45 version and the VK-1 version, are in preparation.



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AIRCRAFT TURBOFROP ENGINES - DOMESTIC AND FOREIGN TYPES: This project is in the final stage of completion. The summary is being written and the final draft will be completed in January 1953. Information from Great Britain has been received and included in the study.

PERFORMANCE AND CHARACTERISTICS HANDBOOK: The March 52 issue of the "Soviet Characteristics and Performance Handbook" is being reviewed to make necessary corrections. Work has been initiated on an aircraft performance and characteristics handbook of the satellite countries. A new format for presenting aircraft performance data has been prepared. The first utilization of this format is expected to appear in the satellite handbook, expected to be completed approximately 1 May 53.

NATIONAL INTELLIGENCE SURVEY ON SWITZERLAND: The contribution to NIS on Switzerland was reproduced in final form and forwarded to D/I, AFOIN-2B4, 18 December. However, it is possible this report may be returned for further coordination due to the new NIS organizational procedure recently established.

BRITISH TURBOJET - PRODUCTION, SERVICE AND DEVELOPMENT: Rough draft of the study has been prepared and is presently being coordinated within ATIC. Charts and graphs are in process of being completed in Graphic Services and Reproduction Section.

RECIFROCATING ENGINE SUPPLY AND MAINTENANCE SUPPORT PROBLEM FOR SOVIET AIRCRAFT: During August and September this report was reproduced and distribution made 26 September. In November a trip to





D/I, AFOIN-3A2, AFOIN-2C5 and CIA was made in conjunction with the dissemination and substantiation of this information. Additional information to help substantiate the report has been received. CIA is contemplating future work based on this report. A further report is contemplated when sufficient additional information is obtained.

PCRT: The frequency of this report has been changed from quarterly to a semi-annual basis. The publication, to be dated 1 January 1953, is currently in preparation and is approximately 80 per cent complete. Publication of the report is expected during the latter part of January. The basic format has been changed from a tabulation of information to a narrative type of presentation. The estimates on future aircraft developments will only carry through approximately 1956 and not up to 1960 as in the past.

POTENTIALITIES OF BOUNDARY LAYER CONTROL DEVICES ON SOVIET AIR-CRAFT: The acquisition of texbooks, magazines and technical reports, printed in the USSR and Germany, was arranged with Mr Satin, Office of Naval Research, prior to his recent trip to Europe. A few publications have been received with the bulk expected the latter part of January 1953.

Textbook, reports and magazines were purchased out of an allotment of \$250 given to Mr Satin by ATIC. A paper was prepared for the Commanding General entitled "Status of Boundary Layer Control Throughout the World." This was read before a large gathering at the Air





Research and Development Center, Baltimore, Maryland, 10 December, and was followed by a discussion relating to W-PAFB's Research and Development program.

For interrogation purposes, a concerted effort is being made to obtain the names and whereabouts of well-known German scientists and engineers, formerly engaged in boundary layer control work in Germany, who subsequently went to the USSR.

No further progress has been made in completing the technical reports concerning the boundary layer control aspects of the MIG-15 and Type 31 aircraft.

PREPARATION OF HANDBOOKS ON FOREIGN AIRCRAFT OTHER THAN SOVIET:

Additional engineers have been assigned to this project to expedited
the preparation of handbooks in the form of studies. During the latter
part of October, the French study was prepared in rough draft form,
and coordinated during the latter part of November. Work is proceeding satisfactorily on the Italian Aircraft Study which will be prepared
in rough draft form during January 1953. The British Aircraft Study
is now scheduled to be completed for coordination on 28 April 1953.

MISSILE PARAMETER STUDY: The preliminary results for surfaceto-air missile trajectories have been completed with applications of the three-point intercept method on the German Wasserfall missile, Further investigation on the effective range is being continued.

ANALYSIS OF THE SOVIET TYPE 15 AIRCRAFT: Due to higher priority work, this project was suspended on 14 August. It will be reactivated later.





combat radius capabilities of the MIG-15: This project entailed a study of the combat radius capabilities of the MIG-15 with the VK-1 engine installation, with (1) no external fuel, (2) with 140 gallons of external fuel, and (3) with 250 gallons of external fuel. Charts depicting these capabilities were prepared and forwarded to FEAF on 15 July. A letter dated 31 July was received from FEAF expressing gratitude for the charts received. A complete study on the subject was prepared, coordination has been completed with ATI, and copies are now being prepared to be forwarded to D/I USAF for final approval.

THIRD GUIDED MISSILE PANEL MEETING: The third Guided Missiles

Panel Meeting was held on 6 - 7 August to present available intelligence and the results of analysis to a panel of contractors! representatives, observers from other intelligence agencies, and other military organizations and USAF Commands. Minutes of the meeting were
prepared and the project terminated following distribution. Copies

were hand-carried to four charter panel members in November.

FROJECT STORK: This contract was initiated to gain the Air

Force an outside contractual arrangement to provide a source of scientific research, study and analysis of the technical capabilities of a foreign government to wage offensive warfare and to defend itself against air attacks. It also provides for analysis and evaluation of selected foreign air material and related data, studies and reports concerning the technical characteristics and performance, and







manufacturing techniques as well as material employed in the production of such material. This work is directed by initiating specific sub-projects prepared by various engineers of the Technical Analysis Division.

To date, 128 sub-projects have been initiated under this contract and it predecessors. Of the sub-projects initiated during the reporting period, 70 were completed, 16 cancelled and 42 remain active. Six technical reports, three special reports and nine letter reports were published and distributed during the reporting period. Supplemental funds were added to this contract in the amount of \$321,724.







TOP SECRET

AUTH: CG. ATIC

DATE: 30 JA

Project 20024

(Electronic Reconnaissance)

Expansion of Section Responsibilities: A detailed study was prepared recommending the lines along which ATIC operations in the field of electronic reconnaissance should develop, based on a new general policy of Headquarters, USAF showing greatly increased emphasis on this Air Force program. General approval was received. As a result, activities relative to Project 20024 will be considerably expanded in scope, and the Countermeasures Section (ATIAE-3) will experience an increase in both personnel and responsibilities.

Investigation and Development of New Methods of Technical Intelligence in Field of Guided Missiles: A new Contract was established with Haller, Raymond and Brown Inc., State College, Pennsylvania. It is planned that a considerable portion of the studies under this contract will be for the benefit of USAFSS. The various phases of the contract have been coordinated with Haller, Raymond and Brown, ATIAE-3 and USAFSS in several joint conferences. Among the more important phases of the new contract are:

- a. The study of machine methods in analysis of voice communication.
- b. The preparation of an electromagnetic propagation manual.
- c. Revision and introduction of new material in the technical handbook (originally prepared under old contract).



73-2777ACy 4

- d. The development and implementation of a training program for USAFSS personnel.
- e. Consultant services with USAFSS. Major Linder, ATIAE-3, continued on TDY during month of August, completing the preparation of analysis procedures at Headquarters, USAFSS.

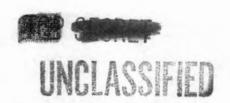
Application of Statistic Methods to ECM Analysis: The application of statistic methods to intercept analysis was continued in connection with several specific problems. The cooperation of both the Statistical Services Division of AMC and of the Flight Research Laboratory of WADC was obtained.

A statistical comparison was made of data on pulse recurrence frequencies as reported by intercept operators and as measured in the laboratory from audio recordings. Several significant points were brought out.

Arrangements were made for a series of trials of machine methods of analysis of reconnaissance data.

An initial conference was held at Eglin Air Force Base with Air Proving Ground Command. ATIAE-3 representatives were Mr. Thom and Lt Fessler. A program to evaluate electronic reconnaissance equipment was discussed. It is planned to initiate a new program to study and develop "standards of performance" for existing operational electronic intercept equipment. A series of conferences had been previously held with research and development personnel regarding their participation in the program.

Development of Standardized Air Force ECM Analysis Procedures: Continuing effort was devoted to standardizing analysis procedures in the field of electronics recommaissance. Mr. L. H. Lloyd participated





in a conference with personnel of SAC and USAFSS, at Brooks Air Force Base, San Antonio, Texas, for the purpose of developing standard methods of logging, reporting, and analyzing reconnaissance data. The 30-day temporary duty of Major W. J. Linder at Brooks Air Force Base was to some extent for the purpose of standardization of procedures.

Liaison with Wright Air Development Center: Liaison with WADC continued during reporting period. Topics discussed included:

- a. Operational use of the AN/ALR-1 Countermeasures receiving set.
- b. Specifications required for production units of the AN/APD-4 (Della-Rosa equipment).
- c. The results of recent WADC visit to the Far East.
- d. Coordination with personnel assigned to new ARDC-WADC Staff field team, before departure to the Far East on liaison duty.

The Development of Intelligence Requirements for Electronic Equipment: Activity in establishing intelligence requirements and specifications of electronic equipment for electronic reconnaissance applications is continuing. Specifications for improved Direction Finder equipment and certain modifications to AN/APD-4 have been coordinated.

Instrumentation of Exploratory Aircraft: The Air Force has assigned the precedence rating 1-la and project SAC-2B-721 to the instrumentation of a special exploratory type electronic reconnaissance aircraft. The staff planning and design for the instrumentation of this aircraft was completed during the summer. The instrumentation was started at Sacramento, California.



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Preliminary Analysis of Electronic Reconnaissance Data: Regular work related to the preliminary analysis of data from electronic reconnaissance missions continued. This included putting this data in readily available form for subsequent study and analysis, and analyzing direction finder data with a view to determining probable locations of alien radar equipment.

Laboratory Analysis: Regular laboratory investigation of complex radio-frequency transmissions continued. Liaison and exchanges of material with AFSA, Signal Corp. USAFSS and SAC are continuing. Progress in preparation of comments on field experiments in pulse analysis with AN/SLA-1 is continuing.

Special Techniques for Pulse Analysis: The evaluation of a new pulse analysis technique, developed by ATIAE-3, and using the AN/SLA-1, is continuing. Recommendations are being forwarded to the operational unit regarding the value of this technique and the excellent manner in which the project is proceeding.

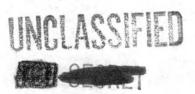
The Evaluation of Intelligence Data From Operational "Della-Rosa" Missions: The studies under Supplement No. 23 of Air Force Contract W33-038-ac-15012 are continuing. The analysis of the AN/APD-4 (airborne instantaneous microwave direction-finder) data is approximately 75% complete. A representative of ATTAE-3 visited Federal Telecommunications Laboratories, Inc. to coordinate on requirements and recommendations to be included in the interpretation of the results.

Shoran Investigation in the Far East: The investigation of Shoran interference in FEAF is continuing with WADC and Armement Laboratory



personnel participating in intelligence interpretation of these reports.

Participation in J/SE Activities: Participation continued in the activities of the Joint Signal Evaluation and Analysis Subpanel, Joint Electronic Warfare Panel.



#### GLOSSARY

AIR TECH INTSUM -Air Technical Intelligence Summary AMC -Air Materiel Command AMPR -A manufactured weight (less engines, armament, wheels, etc. not gov't furnished or furnished by vendor) ANP -Air Nuclear Propulsion ARDC -Air Research and Development Command ATI (C) -Air Technical Intelligence Center Technical Analysis Division, ATIC ATIA -ATIAE -Electronic Branch, ATIA ATIR -Technical Requirements Division, ATIC ATIX -Air Intelligence Office, ATIC ATLO -Air Technical Liaison Office (Officer) BAIR -Basic Air Intelligence Requirements BAGR -Bureau of Aeronautics General Representatives CADO -Central Air Documents Office CIA -Central Intelligence Agency DIRAMA -Daily Intelligence Reports to Air Materiel Areas FY -Fiscal Year ICGM -Intelligence Collection Guidance Memorandum

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NIS - National Intelligence Survey

PAM - Personnel Actions Memorandum

PIF - Project Initiation Form

SRI - Specific Request For Information

USAFSS - United States Air Force Security Service

USFA - United States Forces in Austria

WADC - Wright Air Development Center



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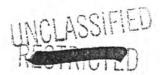
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- 1. Collection of technical intelligence information, imbaling foreign corremations can related equipment required for the production of technical intelligence.
- 3. The configurate and evaluation of technical intelligence in-
- h. Provision of logistical-type services to support the Center's various activities. This includes reception, processing, and storage of documents; limited services for reproduction of documents; publication of intelligence reports and station; and specialized training of selected personnel performing Air Technical Intelligence duties.

In order to perform those functions, the Air Technical Intelligence Center has been organized as indicated on the Organizational Chart attached boreto. In addition to four staff offices - Air Jaspector's Office,

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#### Intelligence Publications Branch

Under plans laid in secenter 1051 by he Office of the Corranding Officer, Air secondard Intellience enter, the ATIC BULLETIN was established in January 1952. This publication is issued weekly, to disseminate air technical intellience information to a encies within the National Defens Establishment, mainly to the Air Material Com and, the Air esearch





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Planning for publication of the BULLTT' had been based on the premise that the missions of all these agencies, an consequently the overall security of the US, are directly affected by current and anticipated developments in the technology of foreign air power. The BULLTIN was conceived as a means of furnishing interested agencies with information concerning these developments. In the planning it was recognized that the value of this information would be dependent up a its accuracy and its dissemination; and on the other hand it was anticipated that there would be considerable danter in the premature use of unevaluated information. This thinking is reflected in the foreward, published in every issue of the periodical:

The NTC Bulletin is published every riday by the Mir Tochnical Intelligence Senter, Wright-Patterson Mir Force Dase, to furnish Air Technical Intelligence information on developments, related to the technical Society of Society air power—information that is timely and reasonably authentic but not thoroughly evaluated.

"Ifter evaluation and comparison with other data, the isola ed fragments of information contained in this Bulletin will, if
they are considered pertinent and significant, be integrated into the
existing fund of knowledge for eventual incorporation into formal
ATIC studies and reports, in an effort to present the best possible
current estimates of the situation."

"It should be born in mind that single items of information, such as these, may be misleading in themselves, and that they acquire significance only when they are collated with established facts. It is suggested, therefore, that this Center be consulted





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