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HISTORY OF
AIR TECHNICAL INTELLIGENCE CENTER

1 JULY 1954 - 31 DECEMBER 1954

AIR TECHNICAL INTELLIGENCE CENTER
WRIGHT-PATTERSON AIR FORCE BASE
OHIO

Copy No. 4

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HISTORY OF
AIR TECHNICAL INTELLIGENCE CENTER
1 July 1954 - 31 December 1954

Prepared by

Air Intelligence Branch

AIR TECHNICAL INTELLIGENCE CENTER

31 January 1955

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FOREWORD

TO THE HISTORY OF

THE AIR TECHNICAL INTELLIGENCE CENTER

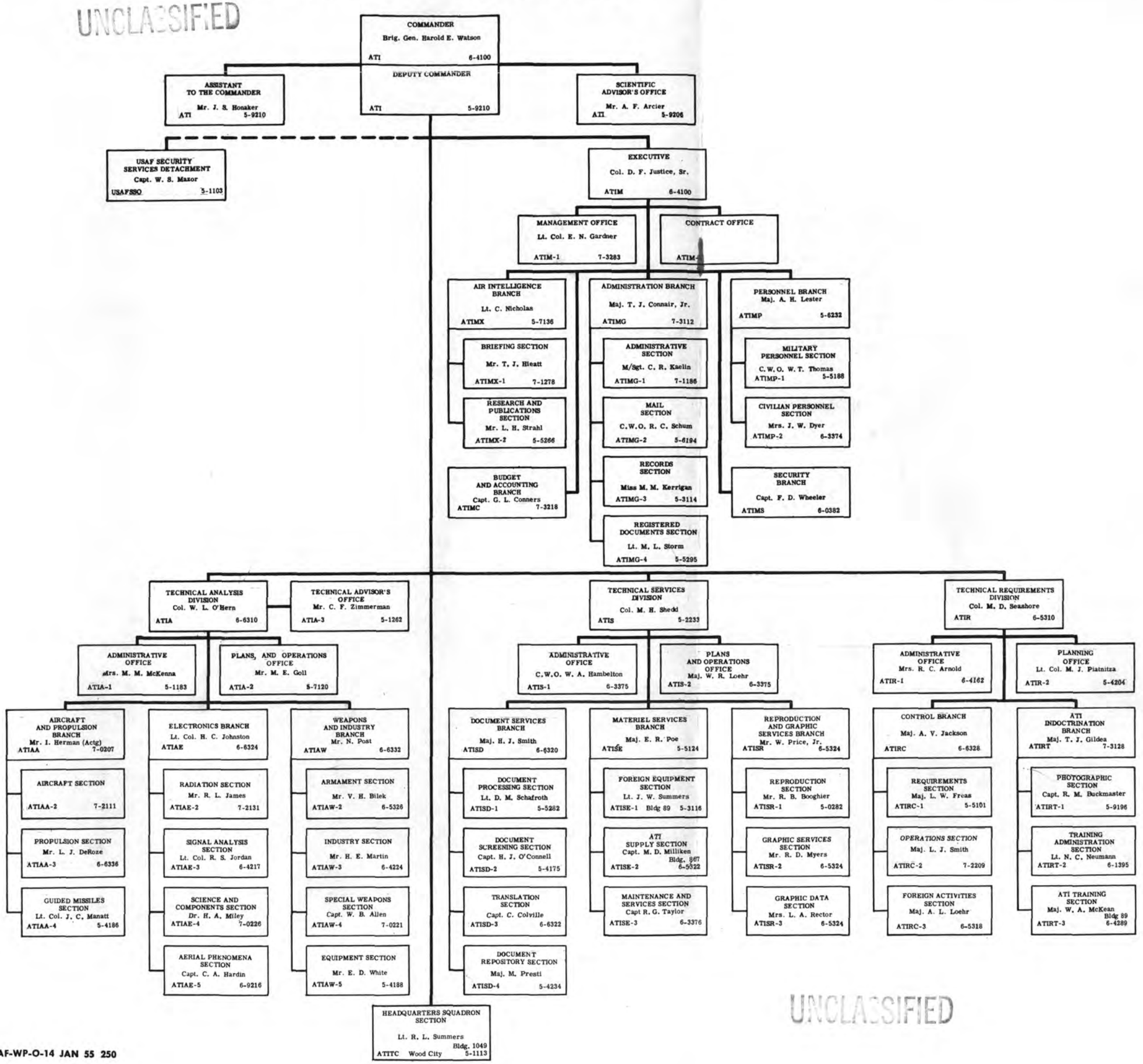
For the Period

1 July 1954 - 31 December 1954

The format and arrangement of this edition of the History of the Air Technical Intelligence Center is essentially the same as the previous edition for the first half of 1954. It will be noted that the chapters, each dealing with an organizational component of the Center, have been reduced in number, from six to five. This conforms to the reorganizational change effected 7 December 1954.

The chart on the following page reflects the principal organizational changes effected 7 December 1954.

ATIC ORGANIZATIONAL DIRECTORY CHART



OFFICE OF THE COMMANDER

OFFICE OF THE COMMANDER

I. ORGANIZATION, FUNCTIONS, AND PERSONNEL

On 7 December 1954, the office and functions of the Executive, which included the Internal Security Office, was transferred from the Office of the Commander and established as a separate staff office.[1] (Uncl)

On 15 September 1954, Brigadier General Harold E. Watson, who had previously been assigned to the staff of Headquarters, Allied Forces Southern Europe, reported for duty and assumed command of the Air Technical Intelligence Center,[2] replacing Colonel George L. Wertenbaker. Colonel Wertenbaker was assigned as Deputy Commander on the same date.[3] Effective also on the same date, Colonel John A. O'Mara was relieved from duty as Deputy Commander and assigned to duty as Executive to replace Colonel Malcolm D. Seashore,[4] who, since 7 September 1954, had served as Chief, Technical Requirements Division with additional duty as Executive.[5] On 26 November 1954, Colonel O'Mara was relieved from duty

1. 1125th USAF FAG (ATIC), GO #34, 7 Dec 54.
2. Hq 7100th Sup Wg (USAFE), SO #77, 5 Aug 54.
3. 1125th USAF FAG (ATIC), GO #25, 15 Sep 54.
4. Ibid
5. 1125th USAF FAG (ATIC), GO #22, 7 Sep 54.

as Executive and was assigned to the Office of the Scientific Advisor as a Special Advisor.[6] Colonel Dane F. Justice, Sr. was assigned as Executive on 26 November 1954.[7] Colonel Wertenbaker was relieved from duty as Deputy Commander and assignment to 1125th USAF FAG (Air Technical Intelligence Center) on 3 December and reverted to inactive status to accept a position in industry.[8]

The establishment of the Executive as a separate staff office on 7 December 1954 resulted in the following decrease in the manpower authorizations and positions in the Office of the Commander:

1	colonel	Administrative Staff Officer
1	major	Administrative Officer
1	master sergeant	Administrative Supervisor
1	GS-3, clerk-stenographer	
1	GS-3, receptionist	

The manpower authorizations in the Office of the Commander at the close of this period were:

2	officers (1 brigadier general; 1 colonel)
1	airman (A/1C)
6	civilians (2 GS-15s; 1 GS-6; 2 GS-5s; 1 GS-3)

The key personnel assigned were:

Commander	Brigadier General Harold E. Watson

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6. 1125th USAF FAG (ATIC), PERAM 82, 1 Dec 54.

7. 1125th USAF FAG (ATIC), GO #31, 26 Nov 54, as amended by GO #33, 6 Dec 54.

8. DAF, SO #227, 23 Nov 54.

Deputy Commander	(Vacant)
Special Advisor	Colonel John A. O'Mara (Overage)
Scientific Advisor	Mr. A. Francis Arcier
Civilian Assistant	Mr. John S. Honaker

(Uncl)

II. ACTIVITIES, EVENTS, AND PROBLEMS

(Uncl) ACTIVITIES:

Colonel Wertenbaker, Commander, departed on 23 August 1954 for Europe to visit the Air Technical Liaison Offices in Germany, Sweden, Belgium, France, and England, and to attend, by invitation, the Flying Display and Exhibit of the Society of British Aircraft Constructors at Farnborough, England.[9] Colonel Wertenbaker arrived in Wiesbaden, Germany, on 25 August 1954, and departed for Stockholm, Sweden, the following day. In Stockholm he discussed various problems and projects with Colonel Charles H. MacDonald, Air Attache, and Lieutenant Colonel Robert R. Shaeffer, Chief ATLO. He returned to Wiesbaden on 1 September and there conferred with Brigadier General Edward H. Porter, DCS/Intelligence, USAFE and Colonel George R. Hundt, Chief ATLO, USAFE, on urgent problems pertaining to funding and certain classified collection projects being carried out by that office.

On 6 September, Colonel Wertenbaker arrived in London, England, to visit the ATL Office and to attend the SBAC Show at Farnborough. At this show he had the opportunity to observe the latest British aircraft

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9. 1125th USAF FAG, Ltr Order #64, 17 Aug 54.

and component developments. On 8 September he returned to Wiesbaden, Germany to resume discussions with Intelligence personnel at USAFE. He could not visit the ATL Offices in Belgium and France, as originally intended, because of the necessity for spending additional time at Headquarters, USAFE, and because of his desire to return to ATIC prior to arrival of the new Commander on 15 September. He arrived at ATIC 13 September and on 15 September Brigadier General Watson assumed command.[10] (Uncl)

Colonel John A. O'Mara was admitted to the station hospital at Wright-Patterson AFB, Ohio on 6 December 1954 for observation and treatment, and was still hospitalized at the close of this period. (Uncl)

Brigadier General Watson departed on 10 December 1954 for Headquarters, USAFE, Wiesbaden, Germany,[11] to discuss the advisability of establishing an ATIC Field Office in Europe (FOE) and to define the relationship between ATIC and ATLO. Arrangements were made for setting up the Field Office and a definite understanding of the ATIC - ATLO relationship was agreed upon. General Watson returned to Wright-Patterson AFB, Ohio on 19 December 1954. (Uncl)

A thorough review of the services provided by the Battelle Memorial Institute under the omnibus contract popularly referred to as "Project Stork" was made during the period by a special committee appointed by the Commander. This committee consisted of Colonel John A.

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10. Footnote 2, supra.

11. 1125th USAF FAG, Ltr Order #966, 6 Dec 54.

O'Mara, Deputy Commander, Mr. A. Francis Arcier, Scientific Advisor, Mr. John S. Honaker, Civilian Assistant to the Commander, and Major George G. Hedblom, Contract Officer assigned to the then existing Policy and Management Office. After considering the Committee report and other factors, the Commander decided that Project Stork control should be transferred from Technical Analysis Division to the newly established Contract Office under the Executive.[12] Mr. Honaker, working directly under the Commander, was placed in charge of the project temporarily until a new set of procedures have been worked out and are firmly established. Administrative controls were established to approve requirements placed on the contractor, to screen information supplied the contractor, and to continue review of the services and products provided ATIC by the contractor. A series of directives also have been published to carry out the Commander's policies concerning utilization of Project Stork services. ([redacted]) (uncl)

(Uncl) EVENTS:

A meeting sponsored jointly by the ATIC and Wright Air Development Center, was held on 14 and 15 October for a group of field representatives of Central Intelligence Agency. Lieutenant General C. P. Cabell, Deputy Director of the CIA, attended the meeting on 15 October 1954. The purpose of the meeting was to brief the CIA Field Representatives on the mission and requirements of ATIC, and to bring them up to date on the state of the art in USAF research and development.[13] (CONFIDENTIAL)

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12. See page 14, infra.

13. Project 40018: Collection of ATI Info - Domestic

Air Vice Marshal of the Royal Air Force W. M. L. MacDonald, CBE, DFC, Assistant Chief, Air Staff, Intelligence, of the British Air Ministry, arrived at Wright-Patterson AFB, Ohio, on 11 November for briefing and orientation on the mission and certain operations of the ATIC. After briefings by each division chief and discussion in the Commander's Office, Vice Marshal MacDonald was conducted on an automobile tour of Wright-Patterson AFB and especially Wright Air Development Center and the flight line. (Uncl)

Mr. Karl-Arvid Norlin and Major Gosta Hellstrom of Sweden, who visited ATIC during the previous reporting period, again visited the Center, accompanied by Major Erick Malmberg, a technical officer of the Air Materiel Staff of the Swedish Air Force. The visitors arrived 5 December, and on 6 December they conferred with General Watson and key personnel of the Center. They returned to Washington, D. C. late in the afternoon, 6 December. (Uncl)

PROBLEM:

(Uncl) Proposed Establishment of Operations Office. Plans for the proposed Operations Office which was described briefly in the previous installment of the history were completed, but implementation of these plans was held in abeyance after notification in July that Brigadier General Watson had been assigned as Commander, ATIC, effective 15 September. Although the Executive was established as a staff office on 7 December 1954 in a manner similar to the proposed organization for the Management Group of the Operations Office, its scope was modified. The Commander, ATIC, at the present time, has the proposal for establishment of the Operations Office under advisement. (Uncl)

(Uncl) ACTIVITIES OF HEADQUARTERS SQUADRON SECTION:

Effective 15 July 1954, one position, Assistant Morning Report Clerk (AFSC 73231), was cancelled as required by the reduction in strength directed by Director of Intelligence, Headquarters, USAF.[14]

The program for improvement of the Airmen's barracks, orderly room, and day room, continued and considerable progress was made on all buildings. Most of the work was done by airmen of the organization.

At the end of the period First Lieutenant Robert L. Summers was Commander of Headquarters Squadron Section.

Personnel authorization was eight, including the Commander, and there were eight assigned. (Uncl)

(Uncl) USAF SECURITY SERVICES DETACHMENT:

The activity, a detached service from Kelly Air Force Base, San Antonio, Texas, continued to furnish ATIC with expeditious and secure service in the receipt, storage, transmission, and distribution of special intelligence.

At the end of the period Captain Walter S. Mazor was the officer in charge of the activity. In August 1954, Captain Davis B. Potter replaced Mr. Fred O. Kobernuss as ATIC liaison representative to the Security Services Detachment. Mr. Kobernuss was assigned to the ATL Office in Germany. (Uncl)

14. D/F fr Policy and Management Office, ATIC, 15 Jul 54, Subj: Canc of Auth Pos.

THE EXECUTIVE OFFICE
(ATIM)

THE EXECUTIVE ORGANIZATION

I. ORGANIZATION, FUNCTIONS, AND KEY PERSONNEL

The Executive Organization is currently the only staff office in the Air Technical Intelligence Center. It was formed 7 December 1954[1] by removing the position of the Executive from the Office of the Commander and consolidating under the Executive's direction all the staff-administrative and services functions formerly performed by the Policy and Management Office[2], the Adjutant's Office, the Security Office[3], and the Air Intelligence Office. (Uncl)

In addition to the functions transferred to the Executive organization with this major reorganization, two functions were added:

Public relations and public information, previously not assigned to any specific component. (Uncl)

Protocol and superintendence of visits of important persons to the Center, previously the responsibility of the ATI Indoctrination Branch, Technical Requirements Division. (Uncl)

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1. 1125th USAF FAG (ATIC): GO 34, 7 Dec 54

2. The Policy and Management Office was discontinued with the formation of the Executive Organization. The office symbol for the Policy and Management Office, ATIM, was assigned to the Executive.

3. Functions and personnel of the former Internal Security Branch, Inspector General's Office, were transferred to the Office of the Commander and placed under the supervision of the Executive when the Inspector General's Office was abolished, 3 May 54 (1125th USAF FAG (ATIC): GO 13, 3 May 54). The Security Office ceased to exist as an organizational entity when its functions were thus transferred.

This reorganization consolidated all the functions not directly related to the Center's primary mission, production of air technical intelligence, under one head and reduced the number of major components from six to four. (Uncl)

The primary purpose of the Executive Organization is to keep the Commander informed on all matters affecting the Air Technical Intelligence Center; to transmit the Commander's decisions, orders, and instructions to appropriate components and insure compliance thereto; to centralize and correlate administration and management matters; and to provide those administrative services that can best be performed by a centralized office. (Uncl)

The Executive Organization consists of two offices and five branches with specific responsibilities as follows:

The Management Office, formerly the Management Analysis Branch of the Policy and Management Office, responsible for organizational structure, manpower, systems, procedures, and general management practices. (Uncl)

The Contract Office[4], a new organizational entity, responsible for the over-all management of Air Technical Intelligence Center contracts. (Uncl)

The Budget and Accounting Branch, formerly a branch with the same name under the Policy and Management Office, responsible for budget administration, financial planning, fiscal and cost accounting. (Uncl)

4. The Contract Office had not been activated at the close of the reporting period.

The Personnel Branch, formerly a branch with the same name under the Policy and Management Office, responsible for the Air Technical Intelligence Center personnel program and services. (Uncl)

The Administration Branch, formerly the Adjutant's Office, responsible for standard administration services provided by an adjutant. (Uncl)

The Security Branch, a re-established organizational entity[5], responsible for the Air Technical Intelligence Center security program which includes personnel clearances, security indoctrination, physical security, and personnel investigations. (Uncl)

The Air Intelligence Branch, formerly the Air Intelligence Office, responsible for intelligence services for the Air Materiel Command and the Wright Air Development Center, primarily; intelligence periodicals; oral briefings; public information and public relations; visitors and protocol. (Uncl)

Authorized manpower and assigned strength for the Executive Organization at the close of the period were:

	Officers	Airmen	Civilian	Total
Executive's Office				
Authorized	2		1	3
Assigned	1		1	2
Management Office				
Authorized	1		5	6
Assigned	1		4	5

5. Footnote 3, supra.

	Officers	Airmen	Civilians	Total
Contract Office				
Authorized	1			1
Assigned	0			0
Budget & Accounting Branch				
Authorized	2	1	5	8
Assigned	2	1	5	8
Personnel Branch				
Authorized	2	5	5	12
Assigned	2	6	4	12
Administration Branch				
Authorized	3	8	17	28
Assigned	3	9	16	28
Security Branch				
Authorized	1	1	2	4
Assigned	2	1	2	5
Air Intelligence Branch				
Authorized	2	5	7	14
Assigned	1	6	7	14
Total				
Authorized	14	20	42	76
Assigned	12	23	39	74

(Uncl)

During the period, the following changes occurred in the key personnel of the components that later became a part of the Executive organization:

On 5 August 1954, Captain Byron M. Matthai, Jr.[6], reported from Headquarters, Central Air Materiel Area, France, as replacement for Captain

6. Hq. 7012th Personnel Processing Section; SO 175, par. 5, 21 Dec 54.

James C. Paschal[7], Security Officer, who departed 7 September 1954, for overseas assignment. (Uncl)

On 6 September 1954, 1st Lieutenant Barbara H. Conners[8], Assistant Adjutant and Top Secret Control Officer, resigned from the service. Lieutenant Conners was replaced by 1st Lieutenant Mary L. Storm[9] who had reported 18 August 1954. (Uncl)

On 23 September 1954, Lieutenant Storm replaced Major W. K. Sargent as Adjutant[10]. Major Sargent transferred to the USAF Recruiting Service effective 1 October 1954. (Uncl)

On 27 September 1954, 1st Lieutenant Charles Nicholas was assigned as chief of the Air Intelligence Office, succeeding Lieutenant Colonel John Brownewell, who was reassigned to the 30th Air Division, Willow Run, Michigan[11]. (Uncl)

On 26 November 1954, Colonel Dane F. Justice, Sr., Chief of the Policy and Management Office, was assigned additional duty as Acting Executive Officer, vice Colonel John A. O'Mara, relieved. On 6 December 1954, the orders were amended to make Colonel Justice the executive officer, as originally intended, instead of "acting"[12]. When the Executive Organization was formed on 7 December 1954 the position of Chief,

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7. 1125th USAF FAG (ATIC): SO 106, par. 4, 12 Aug 54.
8. 1125th USAF FAG (ATIC): SO 105, 11 Aug 54.
9. 1125th USAF FAG (ATIC): PERAM 38, 31 Aug 54, amended by PERAM 60, 8 Sep 54.
10. 1125th USAF FAG (ATIC): GO 26, 23 Sep 54
11. 1125th USAF FAG (ATIC): PERAM 68, 29 Sep 54; SO 116, 1 Sep 54.
12. 1125th USAF FAG (ATIC): GO 31, 26 Nov 54, amended by GO 33, 6 Dec 54.

Policy and Management Office was abolished. (Uncl)

On 1 December 1954, Major George G. Hedblom[13], Contract Administrator, office of the Chief, Policy and Management Office, transferred to Headquarters, AMC. With Major Hedblom's transfer, the position of contract administrator was abolished, the work to be absorbed by the newly established Contract Office and the Budget and Accounting Branch. The allotment for Major Hedblom's former position was transferred to the Budget and Accounting Branch and was filled by 2nd Lieutenant Jack L. Cox[14], accountant, 14 December 1954. (Uncl)

On 3 December 1954, Major Thomas J. Connair[15] was assigned as Adjutant, and Lieutenant Storm reverted to her original assignment as Assistant Adjutant and Top Secret Control Officer. Major Connair was formerly the chief of the Documents Services Branch, Technical Services Division. (Uncl)

On 23 December 1954, Captain Franklin D. Wheeler[16], who had been serving with 316th Air Division (Def) Morocco, reported and assumed duties as Security Officer on 27 December 1954, which relieved Captain Matthai who was awaiting reassignment. (Uncl)

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13. 1125th USAF FAG (ATIC): SO 142, 10 Nov 54.
14. 1125th USAF FAG (ATIC): FERAM 84, 14 Dec 54.
15. 1125th USAF FAG (ATIC): GO 32, 3 Dec 54.
16. Hq. 7210th Personnel Processing Section: SO 276, 15 Nov 54.

At the end of the period, key personnel were:

Executive	- Colonel Dane F. Justice, Sr.
Chief, Management Office	- Lt. Colonel Emy-Lee N. Gardner
Chief, Contract Office	- (not designated)
Chief, Administration Branch (Adjutant)	- Major Thomas J. Connair
Chief, Personnel Branch	- Major Alec H. Lester
Chief, Budget and Accounting Branch	- Captain George L. Conners
Chief, Security Branch (Security Officer)	- Captain Franklin D. Wheeler
Chief, Air Intelligence Branch	- Lieutenant Charles R. Nicholas

(Uncl)

II. ACTIVITIES, EVENTS, PROBLEMS

ATIC FINANCIAL PROGRAMS:

(Uncl) Budget Estimates, FY 1956. In July, 1954, revision of the ATIC budget estimates for fiscal year 1956 resulted in a reduction of $50,000 in Project 731 funds. No change was made in the other budget project estimates. Revised budget estimates for FY 1956 are:

Project 481, "Command Administration"	$1,715,950
Project 731, "Contingencies"	2,389,000
Project 443, "Schools and Training"	45,253
Sub-Project 531.10, "PCS Movement of Military Personnel within Major Commands in Zone of Interior"	6,035
Total	$4,156,238

([redacted] (unclas))

(Uncl) Financial Plans, FY 1955:

Financial plans for the second quarter of FY 1955 were revised to provide for a signal analysis facility within the Center. Establishment of this facility required an increase of $143,817 over the FY 1955 budget authorization. (Uncl)

A change in funding Project 731 by sub-allocation instead of allotment, 1 October 1954, enabled the Center to allot funds to overseas offices. (Uncl)

(Uncl) Appropriation Accounting:

The most significant change in accounting procedure was the establishment of the Center as a fiscal station with responsibility for the fiscal accounting of 731 funds, effective 1 July 1954. (Uncl)

A change in the method of funding ATL offices by allotment in lieu of obligation authorities was accomplished for Austria and Japan on 1 October 1954. The changeover to this method of funding the ATL office in Germany was pending as the period closed. (Uncl)

The new Air Force system of accounting as established in AFM 177-1 was installed on 1 July 1954. (Uncl)

(Uncl) Status of Funds. The status of current ATIC funds at the close of the period was as follows:

Project 731 - Contingency Funds:	
Annual Budget authorization	$1,988,000
Allotments	1,400,000
Commitments	1,179,171
Obligations	958,900
Uncommitted Balance	808,829
Percent Utilization	59.3%
Project 481 - Command Administration Funds:	
Annual Budget Authorization	$1,698,996
Allotments	964,000
Commitments	923,642
Obligations	841,182
Unobligated Balance	82,460
Percent Utilization	54.5%

([redacted]) (uncles)

(Uncl) ATIC MANPOWER:

(Uncl) Authorizations. It was not until 13 July 1954 that the ATIC was notified that a new personnel allotment voucher, issued 21 June 1954,[17] had reduced its military authorizations by 18 officers and 6 airmen and had changed 8 lieutenant authorizations to warrant officers. On 30 July 1954, another PAV (personnel allotment voucher)[18] was issued, increasing officer authorizations by 10, changing 1 civilian allotment from ungraded to graded, and transferring 2 graded civilian positions from command administration[19] to schools and training.[20] As a result of these changes, manpower authorizations and grade ceilings for ATIC at the end of the period differed from those at the beginning of the period, as follows:

	1 July 1954 Allotment	31 December 1954 Allotment	Difference
Officers	196	188	- 8
Airmen	111	105	- 6
Civilians	327	327	0
Total	634	620	-14

([redacted]) (unclas)

17. PAV 89/4-15, 21 Jun 54.

18. PAV 91/6, 30 Jul 54.

19. Budget Project 481.

20. Budget Project 443.

(Uncl) Grade Ceilings. Grade ceilings compared as follows:

	1 July 1954 Grade Ceilings	31 December 1954 Grade Ceilings	Difference
Gen Ofcrs & Colonels	12	12	0
Lt Colonels	27	29	+ 2
Majors	44	45	+ 1
Captains	75	71	- 4
Lieutenants	38	23	-15
Warrant Officers	0	8	+ 8
Master Sergeants	23	23	0
Technical Sergeants	23	22	- 1
Staff Sergeants	20	20	0
Airmen 1/C	21	20	- 1
Airmen 2/C	22	18	- 4
Airmen 3/C	2	2	0
Graded Civilians	312	313	+ 1
Wage Board Civilians	15	14	- 1

(CONFIDENTIAL)
(unclas)

(Uncl) Distribution of Manpower Authorizations. Manpower authorizations at end of the period for ATIC components were as follows:

	Total	Civilians	Officers	Airmen
ATI - Office of the Commander	8	5	2	1
ATIM - Office of the Executive	76	42	14	20
ATIR - Technical Requirements Div	216	56	110	50
ATIA - Technical Analysis Div	165	114	43	8
ATIS - Technical Services Div	144	107	18	19
ATITC - Hq Squadron Section	8	0	1	7
Manpower Pool	3	3	0	0
TOTAL	620	327	188 (uncl)	105 (uncl)

(Uncl) Personnel Strength. At the end of the period, 181 officers, 113 airmen, and 304 civilians were assigned, making a total of 598 persons as compared to a total of 574 at the beginning of the period (162 officers, 113 airmen, 299 civilians). Civilian strength increased 5 and officer strength 19, while airman strength remained constant. Average strength for officers throughout the period was 173, for airmen 112. (Uncl)

(Uncl) Personnel Turnover. During the period, 43 officers left the Center and 63 processed in, 25 airmen left and 25 reported in, 36 civilians left and 41 were added to the rolls. Nine of the officers and the same number of the airmen separated from the service, while 34 officers and 16 airmen were transferred. (Uncl)

(Uncl) Other Personnel Changes. In addition to personnel gains and losses, 37 civilians,[21] 2 officers, and 18 airmen were promoted. Thirty-five civilians were changed to lower grade,[22] and 2 airmen were reduced in grade. Thirty-one civilians were reassigned without change in grade. (Uncl)

(Uncl) ATIC Position Structure. During the period, 20 new positions were established, 24 positions cancelled, 23 positions were reclassified, and the title of 9 positions were changed without change in duties or grade. Based on the 327 civilian positions authorized, this represents approximately a 20 percent change in position structure, which is a reduction of 115 percent over the preceding period. (Uncl)

(Uncl) Freeze on Position and Personnel Actions. To prevent further personnel and position changes until pending organizational changes could be decided, a freeze was placed on position and personnel actions, 15 December 1954.[23] (Uncl)

(Uncl) ATIC ORGANIZATION:

In addition to the major reorganization resulting from the combination of all staff functions into the Executive organization,[24] several minor organizational changes occurred. (Uncl)

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21. Twenty of the promotions resulted from the position classification survey completed 30 Jun 54.

22. Thirty-two of the changes to lower grade resulted from the position classification survey completed 30 Jun 54.

23. Memo fr ATIM to Divisions and Staff Offices, 15 Dec 54, "Freeze on Position and Personnel Actions".

24. Page 14, supra.

On 15 July 1954, the ATLO Processing Section of the Personnel Branch was discontinued,[25] the functions being absorbed by the Civilian Personnel Section of this branch. On the same date, the Plans, Operations and Administrative Office of the Technical Analysis Division was divided into two offices: the Administrative Office, and the Plans and Operations Office.[26] (Uncl)

On 5 October 1954, the Flight Operations Office in the Technical Services Division was discontinued and the functions, equipment and personnel transferred to the Training Section, ATI Indoctrination Branch, Technical Requirements Division.[27] (Uncl)

(Uncl) ATIC Organizational and Directory Chart. Two revisions of the ATIC Organizational and Directory Chart were made during the period. The first was published in August 1954[28]; the second, in January 1955, is included in this edition of the history.[29] (Uncl)

(Uncl) New Plan for Organizational Approval. As an aid to stabilizing internal organization, a new plan for approving organizational proposals was adopted during the period. This plan entails operation of the proposed organization on a trial basis for a limited period of time before the organization is officially established. (Uncl)

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25. 1125th USAF FAG (ATIC): GO 17, 15 Jul 54.

26. Ibid.

27. 1125th USAF FAG (ATIC): GO 29, 5 Oct 54.

28. Aug 54 edition of the ATIC chart was included in the "History of the Air Technical Intelligence Center, 1 Jan - 30 Jun 54", p.3.

29. Page 3 .

(Uncl) Survey of Separated Personnel.[30] This project continued but the rate of response decreased considerably. (Uncl)

(Uncl) Performance Requirements Program.[31] Semi-annual supervisory conferences on this program were held in August 1954. Representatives of the Headquarters, AMC Central Civilian Personnel Office and of the AMC Staff Civilian Personnel Division attended as guests of the ATIC. Following these conferences, a number of requests for information concerning the ATIC program were received from Air Materiel Command components. (Uncl)

(Uncl) ATIC Project Control System. Work on revision of this system was suspended because of change in commanders. (Uncl)

(Uncl) Development of Supervisory Personnel. There was no major activity on a Center-wide basis in relation to this program. However, within the divisions much was accomplished informally in supervisory development through the efforts of the division officials and the Central Civilian Personnel Office's placement and employee relations advisor. (Uncl)

(Uncl) Monthly Meetings of Personnel. One meeting was held, 17 September 1954, in the cafeteria of Bldg. 280, to welcome the new commander, Brigadier General Harold E. Watson. Both Colonel Wertenbaker, the outgoing commander, and General Watson addressed the assembled group of military and civilian personnel. (Uncl)

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30. History of ATIC, 1 Jan 54 - 30 Jun 54, page 26.

31. History of ATIC, 1 Jan 54 - 30 Jun 54, page 27.

(Uncl) Civilian Employees Committee: A reorganization of the Civilian Employees' Committees on Wright-Patterson AFB led to establishment of a new ATIC Civilian Employees Committee, superceding the old committee. Under the new plan, organization of Employees' Committees was made optional with components and tenant organizations on the base. The outgoing committee for the ATIC recommended continuance of the committee system in ATIC and it was approved by the Commander. Accordingly, in October 1954, a new ATIC Civilian Employees Committee was formed under an ATIC office instruction.[32] Mr. Ivan Kenis is Chairman and Mr. Lee H. Strahl is Vice Chairman of the Committee. Mr. Kenis also serves as the ATIC representative to the Wright-Patterson AFB Civilian Advisory Council and Mr. Strahl is his alternate. (Uncl)

This committee has held regular monthly meetings and has considered problems pertaining to improvement of physical working conditions, has promoted the base-wide "Litter Bug" campaign within the ATIC, and is screening a number of employee complaints for future study and advice to the Commander. (Uncl)

(Uncl) Policy Directives. In December 1954, a new type of directive was established, the ATIC Policy Directive. This type of publication is issued over the Commander's signature for the purpose of transmitting his personal desires and decisions. Hereafter, functions assigned to components will be published as policy directives rather than in an organization and functions manual. (Uncl)

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32. ATIC OI 14-4, 11 Oct 54.

(Uncl) Records Management:

Mr. F. N. Rendine of the Headquarters USAF Records Management Office visited the Center 11-13 October 1954 to inspect the ATIC Records Management Program. Mr. Rendine expressed satisfaction with the program as a whole. (Uncl)

On 20 and 21 October 1954, the Headquarters AMC Civilian Training Unit, in conjunction with the ATIC Records Officer, conducted a brief course of instruction for ATIC personnel on the standard AF filing system. (Uncl)

Change-over to the AF subject classification filing system was approximately 90% completed by the end of the calendar year. Complete change-over was planned to be effected by 1 January 1955. Delay in revision of the ATIC Project Control System made impossible meeting this target date. (Uncl)

A number of changes contained in the revision of the AF manual on records disposition[33] will necessitate amendment or complete revision of all ATIC Records Control Schedules by April 1955. (Uncl)

(Uncl) Registered Documents and Top Secret Control:

Control of code words and nicknames was added to the responsibilities of this activity during the period. (Uncl)

An initial inventory of all Top Secret material was begun 6 September 1954 and completed 4 October 1954. A policy was established to conduct inventory semi-annually, with inspections annually. (Uncl)

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33. AFM 181-5, "Disposition of Records", 1 Aug 54.

The ATIC office instruction[34] implementing and interpreting security regulations was revised and published incorporating the recent numerous changes in the USAF security system for safeguarding highly classified security information. (Uncl)

A reduction of files, accomplished during the period, relieved the space problem considerably, not only in the registered documents storage area, but in the ATIC repository as well. Strict adherence to records control schedules is necessary to keep this problem under control. (Uncl)

(Uncl) Air Intelligence:

A survey of the needs of a selected group of USAF installations to receive intelligence publications was completed 5 October 1954. The results of this survey were used to revise distribution lists. (Uncl)

Air Research and Development Command made informal request on 6 December 1954 that the title of the briefer disseminated to Wright Air Development Center activities be changed from "ATIC-WADC Briefer" to "ATIC-ARDC Briefer" and distribution expanded to include all activities of the ARDC. This was approved by the Commander, ATIC, to be effective upon receipt of formal request. (Uncl)

At the end of the period plans were well under way to survey the effectiveness of oral briefings to WADC activities. (Uncl)

(Uncl) Security Program:

Requests for 92 security clearances for new personnel were initiated during the period, 74 final clearances were granted, and 62 were pending

34. ATIC OI 205-5.

at the close of the period. Eighty clearances were cancelled because of personnel transfers and separations. Eight persons were denied security clearances for ATIC assignment. (Uncl)

Throughout the period, increased emphasis was given to the prevention of security violations, chiefly through education provided by the Unit Security Officer Program. (Uncl)

TECHNICAL SERVICES DIVISION

(ATIS)

TECHNICAL SERVICES DIVISION

I. ORGANIZATION, FUNCTIONS AND KEY PERSONNEL

During the second half of the year 1954, there were no major changes in the organization structure or assigned functions of the Technical Services Division.

The following changes of key personnel were effected:

Major Thomas J. Connair, Jr. was relieved of assignment as Chief, Document Services Branch, on 8 December 1954 and reassigned to the Executive Office for appointment as Adjutant.[1]

Major Henry J. Smith, who had reported to ATIC from Headquarters, USAFE, was assigned as Chief, Documents Services Division on 8 December 1954.[2]

CWO Willard H. Young was assigned to 2750th USAF Hospital, Wright-Patterson Air Force Base, Ohio, and was retired from active service 30 November 1954.[3]

There were no changes in manpower allotments or position assignments during the period.

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1. 1125th USAF FAG (ATIC), PERAM 83, 8 Dec 54.
2. Ibid.
3. 1125th USAF FAG (ATIC), SO 99, 3 Aug 54.

The following were key personnel of the division at the end of the reporting period:

Chief, Technical Services Division	Colonel M. H. Shedd
Chief, Documents Services Branch	Major H. J. Smith
Chief, Materiel Services Branch	Major E. R. Poe
Chief, Reproduction & Graphic Services Branch	Mr. Wilber Price

Manpower allotments and assignments as of 31 December 1954:

	AUTHORIZED	ASSIGNED
OFFICERS	18	18
AIRMEN	19	19
CIVILIANS	107	99

(Uncl)

II. ACTIVITIES, EVENTS, AND PROBLEMS

DOCUMENT SERVICES BRANCH:

An average of approximately 9000 documents were received monthly, of which 55 percent were discarded after pre-screening; the remaining 45 percent were completely processed and disseminated to interested activities. The high percentage of documents discarded were primarily made up of Foreign Broadcasting Information Service cards, Wringer,[4] and Treasure Island[5] reports. The afore-mentioned reports have little or no technical value to ATIC. A study was made of the various documents received and how each fills the technical requirements of ATIC. Of the 45 percent of these reports that are utilized by ATIC only about 15-18 percent are finally discarded as having no value to our technical analysts. ([redacted] (unclas))

4. Interrogation of repatriates from the Soviet orbit.

5. Abstracts of open source Slavic periodicals.

As a result of discussions held between personnel of Air Information Division of Library of Congress and ATIC during the past several months, approximately 750 Russian language books received by ATIC prior to July 1953 were transferred to AID, Library of Congress.[6] This Center will receive in lieu of the books, identification cards listing pertinent abstracts prepared by AID from the books. (Uncl)

An investigation into the feasibility of establishing an ATIC Office in the New York City area for accomplishment of translations by technically qualified translators on an individual contract basis revealed the following facts:[7]

Security problems would be increased since clearances would have to be made piecemeal as the need for the individual translators arose.

The cost of an office in New York would be prohibitive both from budget and manpower considerations.

Translations accomplished by an individual translator would undoubtedly vary in form, quality, and accuracy in the same ratio as the number of personnel employed.

Reproduction facilities would be extremely limited if not nonexistent.

As a result of these conclusions a decision was made to abandon the idea of establishing a New York office. ([redacted] (unclas))

A plan has been put into effect whereby ATIC, AID and CIA are jointly responsible for the abstracting of Soviet technical and scientific

6. Ltr to ATIC fr Air Information Division, Library of Congress, 8 Dec 54.
7. History of ATIC, 1 Jan 54 - 30 Jun 54, page 49.

periodicals received in the United States. Abstracts of these periodicals provide the "user" with a comprehensive summary of information not hitherto exploited. ([redacted] (Uncl))

The work project of indexing ATIC publications was again studied. This project was initiated some time ago but has been hampered by the pressure of other work with a higher priority.[8] (Uncl)

The problem of personnel shortages has been greatly alleviated by the assignment of additional military personnel. The lack of personnel, however, to fill civilian positions (Clerk Typist GS-2) has continued to seriously handicap the operation of the branch during the entire reporting period. (Uncl)

MATERIEL SERVICES BRANCH:

This branch was given the additional responsibility of coordinating and checking all specific requests for information for foreign equipment being requested for exploitation purposes. This procedure was established to prevent duplication of acquisition by ATIC of items already available within other services. To facilitate the carrying out of this responsibility, the information contained in Joint Technical Intelligence Sub-Committee reports,[9] (Notification of Receipt, Enemy or Foreign Materiel) was entered on 5 X 8 cards and filed under general subjective headings. ATIC provided the committee with one office and one civilian to aid in this compilation. Listings have been completed. (Uncl)

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8. History of ATIC, 1 Jan 54 - 30 Jun 54, Page 48.

9. A committee of the Joint Technical Intelligence Service.

During the early part of November 1954, the Commander, ATIC, authorized a Centralized Signal Analysis Program to be conducted by the Technical Analysis Division. The Technical Services Division participation in this project called for monitoring, and providing for, the modification of the assigned building and procuring the necessary signal analysis equipment and modification items for the building. The deadline set by the Commander for the completion of this project was such that the normal workload within the Branch Office, the ATI Supply Section, and the Maintenance and Services Section, was set aside and all effort was concentrated on this requirement. Close and constant liaison was maintained with Air Installations and Base Procurement. Completion of the project was set for 31 January 1955. (Uncl)

During this period the Foreign Equipment Section received and processed 480 items weighing 21,000 pounds. Of this total, 332 have been distributed to analysts for action.[10] (Uncl)

There were 3,672 pictures taken of nameplates and marking data.[11] By 10 December 1954, all old film containing markings and nameplate data had been assembled in numerical order and filed in the Foreign Equipment Section for use by all services. This task was performed by the Reproduction Section and the Foreign Equipment Section, and three months were required to complete it. (Uncl)

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10. Project 60001: Handling of Foreign Equipment.

11. Project 60002: Nameplate and Marking Data.

On 2 November the Foreign Equipment Section received a DEFA Type 541 French 30mm Aircraft Automatic Gun, which embodies revolver type operating principles. This gun aroused considerable interest among the Armament analysts of the Technical Analysis Division. It has been shipped to a civilian contractor for further analysis and evaluation. (Uncl)

PHYSICAL CHANGES:

The ATI Supply Section was moved from Building 278 to Building S-867. The new office and warehouse substantially increased the supply facilities for the Center. (Uncl)

Repainting of the main building occupied by the Center was started during the period and about 50 percent of the task was completed. (Uncl)

PROBLEMS:

The primary problem in Technical Services Division has been the unusual number of crash priority procurement requests. In the month of December for instance, 24 priority Purchase Requests were processed. Continuation of this trend could cause a real and definite personnel problem. The personnel available was not sufficient to handcarry such items, provide the constant liaison required, and maintain the normal workload. (Uncl)

The location of Building 89, in relation to Headquarters, ATIC (Building 263) handicaps the effectiveness of the Foreign Equipment Section and the Technical Analysis Division. Plans have been completed and work has started on modification of a building, very close to the ATIC main building, which will be occupied by the Foreign Equipment Section upon completion. (Uncl)

REPRODUCTION AND GRAPHIC SERVICES BRANCH:

The Graphic Data Section was fully staffed at the close of the period and in total operation for the first time since it has been established. (Uncl)

A Lith-Master No. 4 Camera was placed in operation in the Reproduction Section. This equipment reduces oversize line drawing to fit an 8½ X 11 Xerox plate. Prior to the procurement of this equipment it was necessary to have this type of reproduction done by AMC printing plant. (Uncl)

Mr. Wilber Price, Chief of Reproduction and Graphic Services Branch, was presented a Superior Accomplishment Award for outstanding achievement. General Watson made the presentation. (Uncl)

The project of cataloging of visual aids was 95 percent completed, and the branch was able to keep up with current production. The remaining 5 percent is made up of old and possibly obsolete aids, which may eventually be discarded.[12] (Uncl)

Average monthly production figures for the branch were as follows:

Reproduction by ozalid, photostat and mimeograph - 7000 pieces.

Reproduction by multilith - 60,000 pieces.

Reproduction by photo offset - 10,000 pieces.

Photographic processes - 55,000 frames.

Photographic interpretation - 140

Illustrations, (Administrative and Technical) - 285 pieces. (Uncl)

12. History of ATIC, 1 Jan 54 - 30 Jun 54, Page 48.

TECHNICAL REQUIREMENTS DIVISION

(ATIR)

TECHNICAL REQUIREMENTS DIVISION

I. ORGANIZATION, FUNCTIONS, AND KEY PERSONNEL

During the reporting period, the Technical Requirements Division acquired the Flight Operations function from the Technical Services Division.[1] This function was transferred as soon as the ATIC was allocated a C-47D Aircraft (SN 43-48856) to support the special training and classified cargo transport mission. The Flight Operations function was assigned to the ATI Indoctrination Branch since the aircraft will be used primarily for special training purposes. (Uncl)

The following changes in key personnel occurred:

Colonel Rolf D. Cape, Chief, ATIR was transferred to Hq 1142d USAF Special Activities Squadron, United States Forces in Austria, effective 1 October 1954.[2]

Colonel Malcolm D. Seashore, who was previously assigned as Executive, was assigned Chief, ATIR, effective 7 September 1954.[3]

Lt Colonel Elmer T. Harshbarger, Chief, ATI Indoctrination Branch was transferred to Hq 4th Air Division, SAC, Barksdale AFB, Louisiana, effective 2 November 1954.[4]

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1. 1125th USAF FAG ATIC, GO 29, 5 Oct 54 .
2. 1125th USAF FAG ATIC, SO 118, 8 Sep 54.
3. 1125th USAF FAG ATIC, PERAM 58, 31 Aug 54.
4. 1125th USAF FAG ATIC, SO 130, 5 Oct 54.

Major Thomas J. Gildea, Jr., was assigned Chief, ATI Indoctrination Branch, effective 29 October 1954.[5] (Uncl)

In July, this division lost 10 officer authorizations through a mandatory cut of vacant positions; six positions, however, were added to the authorized strength during the month of August. One airman authorization was gained with the transfer of the Flight Operations function. (Uncl)

At the end of the period, the primary mission of the Technical Requirements Division was to consolidate and compile the requirements of the ATIC for air technical and scientific intelligence information, and to locate, recommend, and evaluate means for obtaining this information. The selection, training, guidance, and general administration of field personnel engaged in collection activities were also major responsibilities of this division. In direct support of specialized training given by the ATIC, the Technical Requirements Division was also responsible for the Flight Operations function within the ATIC. (Uncl)

On 31 December 1954, manpower allotments and personnel strength were: 110 officers authorized, 92 assigned; 50 airmen authorized; 48 assigned; and, 57 civilians authorized with 50 assigned. (Uncl)

Organizational components and key personnel at the end of the period were:

Chief, Technical Requirements Division	Colonel Malcolm D. Seashore
Chief, Planning Office	Lt Col Michael J. Piatnitza

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5. 1125th USAF FAG ATIC, PERAM 77, 2 Nov 54.

Chief, Control Branch	Major A. V. Jackson
Chief, ATI Indoctrination Branch	Major Thomas J. Gildea, Jr.
Administrative Assistant	Mrs. Ruth C. Arnold

(Uncl)

II. ACTIVITIES, EVENTS, AND PROBLEMS

During this reporting period, work progressed on the following projects as indicated:

(Uncl) COLLECTION PROGRAMS:

(Uncl) REG Program.[6] During August and September target brochures for Postfachs 14 and 405[7] were returned from the Scientific Estimates Committee, Washington, D.C., and forwarded to the Technical Analysis Division where they were reviewed and accepted. The Scientific Estimates Committee returned to the ATIC target brochures for Postfachs 6 and 26 to be rewritten to conform to a revised format. Nine other target brochures were also returned to the ATIC for final editing prior to publication. Editing revealed gaps in the intelligence coverage of Postfachs 908, 648, 456 and 489. Requirements covering these gaps were added and the brochures were returned to Central Intelligence Agency for publication. (SECRET) (U)

(Uncl) Scientist Program:[8]

Prior to this reporting period the majority of the scientists employed by the ATIC were hired on short-term contracts during the summer

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6. Project 40024, Collection of ATI Info - REG.

7. History of ATIC, 1 Jan 54 - 30 Jun 54, page 56, footnote 10.

8. Project 40016, Collection of ATI Information (Specialized Personnel).

months. Requirements for information on specific objectives were not furnished these scientists and as a result the reports prepared following the completion of their overseas tours were of limited air technical intelligence value. (Uncl)

In an effort to improve this program, a procedure was established whereby requirements for coverage of specific fields of air technical intelligence interest were solicited from the Technical Analysis Division; an active recruiting program to obtain qualified scientific personalities was conducted; and the program was expanded to provide for year-round participation. (Uncl)

Under the revised program two new contracts were negotiated, one extended and one terminated. (Uncl)

(Uncl) Scientific Meetings and Trade Fairs:[9]

During the six months covered by this history, advance information on 50 trade fairs and scientific meetings was circulated to the Technical Analysis Division. Fifteen SRI's were initiated. A case folder has been established on each of the meetings and fairs in which the Technical Analysis Division expressed an interest; and, a complete history will be kept on each case. The information will be used later to evaluate the overall productivity of the program. (Uncl)

To further the timely collection of intelligence information, authorization for disbursing 731 Funds for the coverage of meetings and trade fairs was granted the Chief ATLO in USAFE, USFA and FEAF. (~~CONFIDENTIAL~~) (U)

9. Project 40017, Exploitation of Technical and Scientific Meetings.

(U) ~~(CONFIDENTIAL)~~ Domestic Exploitation Program:[10]

From the first of July through the 31st of December, CIA solicited requirements from ATIC on 416 sources. Three hundred thirty-seven (337) requirements were placed on 97 of these sources. Of these requirements, 109 were fulfilled or cancelled, and 196 remain active. ~~(SECRET)~~ (U)

Under the Notification of Foreign Travel Program, ATIC received a total of 280 Notification of Foreign Travel forms and forwarded them to the CIA. Of these sources, 47 were utilized. ~~(CONFIDENTIAL)~~ (U)

(Uncl) General Requirements:[11] Work accomplishments under this project are still being delayed because of lack of personnel who can devote full time to the preparation of general requirements. It has been necessary to continue to utilize the services of the project monitor on other projects of higher priority. During the period, however, ATIC requirements in the field of Environmental Control and Standards were compiled and forwarded to the D/I USAF Screening Panel. (Uncl)

(Uncl) Photo Acquisition:[12]

A working relationship was established with the CIA Graphic Register whereby ATIC can now obtain special priority on requests for graphic reproduction. Previously, the normal amount of time involved in handling requests was from 20 to 30 days. ~~(CONFIDENTIAL)~~ (U)

Arrangements were completed with D/I USAF to assure that the original negatives of foreign airshow fly-bys will be forwarded immediately from the D/I USAF to the ATIC for processing. Prior to this procedure,

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10. Project 40017, Exploitation of Technical and Scientific Meetings.
11. Project 40021, Collection of ATI Information (General Requirements).
12. A Sub-Project of Project 40012, Collection of ATI Information (General).

negatives were processed within the D/I USAF and photographs were forwarded to the ATIC. This often caused a considerable amount of delay in the preparation of special prints for evaluation and in the actual evaluation of the aircraft photographed. (CONFIDENTIAL) (U)

(Uncl) Specific Requests for Information:[13]

On 1 July 1954 there were 200 active SRI's. During the reporting period, 224 SRI's were initiated and 203 were cancelled, leaving 221 active on 31 December 1954. Thirty-two of the SRI's initiated were formulated within the Requirements Section. (Uncl)

Arrangements were made for a monthly list of all SRI's initiated, with a brief abstract of the information requested to be furnished the domestic Air Technical Liaison Officers in order that they might have a better knowledge of current ATIC requirements and thereby increase their reporting effectiveness. (CONFIDENTIAL) (U)

(Uncl) "Blue Fly":[14]

This project remained in a "stand-by" status during this reporting period and was not activated. (Uncl)

A problem arose as to the priority classification assigned to "Blue Fly" project by the 18th Air Force. The liaison officer, Major Harold M. Bergeson, and the ATIC Project Monitor met and resolved this and other problems of minor importance. As a further result of this conference,

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13. Project 40001, Collection of ATI Information - Specific Requests.

14. Project 40020, Collection of ATI Information - Foreign Equipment and Materiel.

Hq 62d Troop Carrier Wing (Heavy) put into effect an operations plan which provides for complete support of "Blue Fly" within twelve hours after receipt of an alert notice by that headquarters. (~~SECRET~~) (U)

In order to insure constant availability of qualified personnel for "Blue Fly," four ATIC officers were assigned duty as assistant project monitors. This assignment takes priority over other Operations Section projects when "Blue Fly" is alerted for travel. (~~CONFIDENTIAL~~) (U)

(Uncl) Fly-Bys. The results of the photographic coverage of the Soviet Tushino Air Show held during August 1954 were marginal. Because of the close surveillance within the area, the photographer was seriously hampered in his attempts to photograph the aircraft observed. (~~SECRET~~) (U)

(Uncl) SPECIAL COLLECTION DEVICES:

(Uncl) Lenses:

The U. S. National Aircraft Show held in Dayton, Ohio, 4, 5 and 6 September, was photographically covered by members of the ATIC. Three pieces of equipment were used: A 24-inch refractor lens with 35mm motion picture camera; a 40-inch refractor lens of British manufacture with 4.5 x 4.5 inch, K-24 aerial camera; and, an 80-inch refractor, Old Delft lens with Leica back. (~~CONFIDENTIAL~~) (U)

The 80-inch lens produced very good photographs; the entire system, however, must be refined before consistent results can be expected. The 80-inch lens is probably the limit for manual panning techniques. Modification of the 80-inch system is currently being made by the Wollensak Optical Company. (~~CONFIDENTIAL~~) (U)

A lens/camera combination similar to the 40-inch telephoto assembly used to cover the National Aircraft Show will be fabricated. This combination will provide a larger format to aid in the tracking problem and a motor-driven film advance to enable the photographer to devote more attention to tracking the aircraft to be photographed. ~~(CONFIDENTIAL)~~ (U)

The U. S. Signal Corps 100-inch lens was inspected and found to be bulky and heavy, with no advantages over lenses presently used by the ATIC. (Uncl)

(Uncl) Recorders.[15] No changes have occurred in the miniature recording program during the period of this history. There is still a need for a small tape recorder. Two miniature recorders of American manufacture are now on loan to the Center for test and evaluation. If tests indicate that they are adaptable to ATIC requirements, action will be initiated to procure a sufficient number for field use. (Uncl)

(Uncl) Film:[16]

Preliminary tests have resulted in a controlled system whereby the emulsion speed of film can be greatly increased provided complete exposure data and test film strips are made available to the laboratory technician. This increase in speed permits the use of longer focal length lenses for photographing moving targets, yet does not adversely affect grain size. ~~(CONFIDENTIAL)~~ (U)

15. History of ATIC, 1 Jan 54 - 30 Jun 54, Page 62.

16. History of ATIC 1 Jan 54 - 30 Jun 54, Page 63.

Eastman Kodak Co. has developed a spectrographic film for microfilm cameras. This film is not commercially available; Eastman Kodak Co. can, however, supply ATIC with a limited amount for test purposes. (~~CONFIDENTIAL~~ (U)

(Uncl) GUIDANCE MATERIAL:

(Uncl) Manuals:[17]

Final drafts of ICGM-Intelligence Photography (AFM 200-9) were submitted to D/I USAF on 27 September 1954, and printed copies are expected to be available in January 1955. This manual reflects all of the guidance information necessary for field collectors to produce worthwhile photographs, and has been endorsed by the Departments of the Army and the Navy, and, therefore, will be released as a Joint Defense Department intelligence publication. (Uncl)

All sections of ICGM-Aircraft Materials (AFM 200-16) were completely reworked, with the exception of the one on "Rubber" which previously had been completed and approved. All reworked sections were approved, and as soon as the mounting and final processing of approximately 150 supporting illustrations are completed, the manual will be ready for submission to D/I USAF for release. Target date for completion is 15 January 1955. (Uncl)

Only three manuals remain to be prepared: Fuels and Lubricants, Industrial, Methods and Research Facilities. Considerable amounts of

17. Project 40014, Preparation of ATI Collection Guidance Manuals.

basic material for these publications have already been contributed by the Technical Analysis Division and work is progressing satisfactorily. It is hoped that all three manuals will be completed during 1955. (Uncl)

(Uncl) Technical Trip Briefs:[18]

The technical trip briefs prepared by the ATIC and submitted to the D/I USAF were favorably received. D/I USAF requested that ATIC send a representative to participate in future meetings of the "Travel Folder Working Group" in Washington, D. C. Selection of an individual to attend these meetings has not yet been made. ~~(CONFIDENTIAL)~~ (U)

During this reporting period, nine additional trip briefs were prepared and forwarded to D/I USAF for the use of field collectors. ~~(CONFIDENTIAL)~~ (U)

(Uncl) Target Folders.[19] At the request of D/I USAF, a list of 50 cities (in order of priority) considered by ATIC as being of collection importance was submitted to that office. D/I USAF will use this list in planning 1955 travel itineraries for pertinent air attaches. Trip briefs will eventually be prepared by ATIC on each of these target cities. ~~(SECRET)~~ (U)

(Uncl) AIR TECHNICAL LIAISON PROGRAM:

An outline of a projected ATL Program was presented to the Commander, ATIC, who directed that a briefing on the status quo of the ATL Program

18. History of ATIC, 1 Jan 54 - 30 Jun 54, Page 64.

19. Ibid.

be given to D/I USAF. This briefing was presented on 2 December 1954. Plans were made to review the entire program and present a finished report to D/I USAF on 1 April 1955. (Uncl)

During the period covered by this history, five officers, three airmen, and six civilian personnel completed tours of overseas duty, and nine officers, three airmen, and five civilians departed for overseas destinations. (Uncl)

Six Air Technical Liaison Officers and two civilian technical specialists were returned from overseas for reorientation and debriefing at ATIC. This reorientation program continues to produce very beneficial results. (Uncl)

The table below reflects manpower and personnel figures relating to the Air Technical Liaison Program:

	Auth 1 Jul 54		Asgd 1 Jul 54		Auth 31 Dec 54		Asgd 31 Dec 54	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
ATL Office, Austria	26	8	21	8	26	8	19	6
ATL Office, Germany	65	15	51	15	62	17	55	14
ATL Office, Japan	9	1	8	1	8	1	7	1
TOTAL	100	24	80	24	96	26	81	21

(Uncl)

A requirement still exists for additional military manpower authorizations for the purpose of training military personnel for replacements in the ATL Program. (Uncl)

A recruiting program was initiated within the Foreign Activities Section in an attempt to obtain greater numbers of qualified personnel for integration into the Air Technical Liaison Program. The voluntary system did not produce a sufficient number of applicants to satisfy the needs of the ATL Offices overseas. (Uncl)

(Uncl) COLLECTION PLANS AND STUDIES:

(Uncl) U. S. Missions Abroad.[20] A plan for technical intelligence exploitation of U. S. Missions abroad was completed on 14 July 1954. (Uncl)

(Uncl) Very Low Frequency Communications.[21] Approved program proceeded according to plan. On 30 November 1954, a conference was held at Hq USAF Security Service, Brooks AFB, Texas, with personnel from ATIC, USAFSS, and selected personnel from industry. Purchase Request was initiated for modifying Low Frequency receiving system. ~~(SECRET)~~ (U)

(U) ~~(CONFIDENTIAL)~~ Foreign Travel of USAF and Contractor Personnel.[22] Administrative difficulties encountered in attempts to implement plans for this project resulted in the project being temporarily closed. (Uncl)

(Uncl) Special Collection Devices.[23] D/I USAF disapproved the request of ATIC for the equipment from Physical Security Equipment Agency (PSEA). The PSEA had been previously deactivated. ~~(CONFIDENTIAL)~~ (U)

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20. History of ATIC, 1 Jan 54 - 30 Jun 54, Page 67.
21. Ibid.
22. Ibid.
23. History of ATIC, 1 Jan 54 - 30 Jun 54, Page 68.

(Uncl) Foreign Manufactured Equipment (Project Janus).[24] Project Janus was approved by D/I USAF, on 30 November 1954. Plans for implementation of the project were completed on 2 December 1954. ~~(SECRET)~~ (U)

(Uncl) Solar Eclipse.[25] No action was taken to debrief the Cambridge Research Team upon their return from their overseas activities. Project was closed on 10 July 1954. (Uncl)

(Uncl) Sonic and Seismic Aircraft Detections.[26] Field test program was held during months of September through October with recordings taken which included advanced types of propulsion. Exploitation of these recordings is being accomplished by Contractor. Additional action was taken on 28 December 1954 to procure new equipment for overseas location. ~~(SECRET)~~ (U)

(Uncl) International Geophysical Year.[27] In December 1954, this project was incorporated in the "Scientist Program" which is operational in the Control Branch of the Technical Requirements Division. (Uncl)

(Uncl) German Patent Office.[28] This project was abandoned on 20 July 1954 because this is an active project with field collection agencies. (Uncl)

(Uncl) Foreign Documents Collection.[29] Recommendation was submitted to D/I USAF, on 22 November 1954, requesting that the Publications

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24. History of ATIC, 1 Jan 54 - 30 Jun 54, Page 68.
25. History of ATIC, 1 Jan 54 - 30 Jun 54, Page 68.
26. History of ATIC, 1 Jan 54 - 30 Jun 54, Page 69.
27. Ibid.
28. Ibid.
29. Ibid.

Air Technical Liaison Officer of USAFE be sent to Moscow on three-months' TDY to assist in the publications procurement program. No action had been taken on this request as of 31 December 1954. (~~CONFIDENTIAL~~)(U)

(Uncl) Foreign Release Function.[30] On 20 July 1954, Coordinating Air Staff, Hq USAF, disapproved the transfer of the function of foreign release of documents from ARDC. (Uncl)

(Uncl) G-2 Organization. Approval was received from D/I USAF, for ATIC personnel to attend G-2 CIC School[31]. This approval was received on 16 November 1954. Plans for implementing this project have been completed. (~~SECRET~~) (U)

(Uncl) De-Sensitizing Photographic Intelligence. A plan was devised to establish the policy and prescribe the procedures for de-sensitizing photographic intelligence within the ATIC before release to non-intelligence organizations. The purpose of this procedure is to obliterate source and method of acquisition of photographs. ATICOI 200-1 was published as a guidance for implementing this policy on 27 December 1954. (Uncl)

(Uncl) MONITORING EVALUATION OF INTELLIGENCE REPORTS:[32]

During the period covered by this history 526 intelligence reports were evaluated. Of the total reports evaluated, 439 were mandatory and

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30. History of ATIC, 1 Jan 54 - 30 Jun 54, Page 70.

31. Army Counterintelligence School.

32. History of ATIC, 1 Jan 54 - 30 Jun 54, Page 70.

the remaining 87 were voluntary evaluations prepared by the analysts of the Technical Analysis Division. Evaluations averaged about 88 per month. (Uncl)

The Requirements Section of this division no longer handles D/I USAF requests for evaluations. This responsibility was assumed by the Document Services Branch, Technical Services Division, in November 1954. (Uncl)

(Uncl) TRAINING ACTIVITIES:

During the past six months, minor changes were made in the training program. In September, the responsibility for the ATIC Work Pool[33] was transferred to the Management Office. Also during September, the Technical Requirements Division assumed the responsibility for the presentation of technical briefings to Air Attaches. These briefings were previously given by the Technical Analysis Division. A five-hour briefing program was prepared and on 9 September, qualified instructors from the USAF Technical Intelligence School, ATIC, presented the first program. Student response to this briefing was excellent. (Uncl)

(Uncl) INSTRUCTION COURSES:

(Uncl) Photographic Training:

A formal program of instruction for Intelligence Photography was completed and published. (Uncl)

One hundred sixty-three (163) selected personnel received specialized photographic training during this period. Two officers from the

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33. Personnel awaiting security clearance.

Office of Naval Intelligence were given 80 hours of instruction in aerial photography and the use of the Leica camera. (Uncl)

(Uncl) Reserve Officer Training. A new project, 70026, was initiated to cover the ATIC training of Air Force Reserve Officers. This phase of the training program was previously included in Project 70019. Conferences were held with officials of the Air Reserve Center, Dayton, Ohio, regarding the possible assignment of ATIC M-Day assignees and designees to that Center for training. Correspondence outlining this proposal was also sent to the D/I USAF for comment. As of 31 December 1954, no action had been taken on this proposal. (Uncl)

(Uncl) Airmen On-the-Job Training. Headquarters, Air Training Command, furnished ATIC with copies of the new Package Courses covering three Air Force Specialties. These specialties are Senior Photographer, Intelligence Operations Specialist and Personnel Specialist. These new courses are in book form and contain the OJT (On-the-Job) Outline and Training Standard, job knowledges, work experiences, references, and guidance necessary to develop the required proficiency in the designated Air Force Specialty. When these package courses are received, they are distributed to various components within the ATIC where airmen possessing the applicable AFSC and requiring OJT are assigned. The immediate supervisors of the airmen are given instructions on the implementation of these training courses. Thus far, the Training Command has prepared courses on only a few of the Air Force Specialties pertinent to ATIC. Additional courses will be forwarded to ATIC as they become available. (Uncl)

(Uncl) ATLO Training. The formal ATL Training Program was published and distributed. Seven officers and two airmen completed the course during the period covered by this history, and eleven officers and one airman were receiving training at the close of the period. (Uncl)

(Uncl) Air Attache Training. Four groups of Air Attaches, comprising 11 officers, received special orientation courses of thirteen-days' duration. Eleven airmen also were trained under this program. (Uncl)

(Uncl) ATI Training. Classes 54C and 54-D were graduated from the USAF Technical Intelligence School. Twenty-seven officers attended the Intelligence Technical Officer Course OB-2061 and seven airmen attended the Technical Intelligence Technician Course AL-20570 on a formal basis. In addition, ten students attended the course in informal status. (Uncl)

(Uncl) Employee Orientation:

An eleven-hour orientation course for newly assigned ATIC personnel (military and civilian) was prepared and distributed within the ATIC for comment. (Uncl)

During the period, ninety-two newly assigned personnel received training consisting of a briefing on the organization and mission of the ATIC and an explanation of Air Force and ATIC security practices. Security examinations were also given to these personnel. (Uncl)

(Uncl) MISCELLANEOUS ACTIVITIES AND PROBLEMS:

(Uncl) Photographic Services. The Photographic Section produced 7221 negatives and 4999 photographic prints for the ATIC during the reporting period. (Uncl)

(Uncl) Training of Instructors. Four military personnel and one civilian from the ATI Indoctrination Branch attended the Academic Instructor's Course at Maxwell AFB, Alabama. (Uncl)

(Uncl) Travel:

Mr. Virgil L. Whited, civilian instructor, Intelligence Photography, visited the Air Attache Offices in Paris, France; London, England; and, Bern, Switzerland, from 23 August until 10 September for the purpose of studying photographic operations at these stations, with a view toward improving the training offered by the ATIC. ~~(CONFIDENTIAL)~~ (U)

Captain Michael Mariolis visited the OSI School, Washington, D. C. from 15 through 18 November for the purpose of examining training programs and instructional materials for possible future use in Technical Intelligence School courses. ~~(CONFIDENTIAL)~~ (U)

(Uncl) Renovation of School Facilities. Renovation of the school facilities was completed with the exception of a few minor details. The school area now contains two large classrooms and one combination briefing room, conference room and library, a much larger student lounge area, and individual offices for various school units. (Uncl)

(Uncl) ATIC Aircraft. A proposal was submitted to Headquarters, USAF, requesting approval for the modification of the C-47 aircraft assigned to the ATIC. The modification would provide for the installation of two vertical camera wells in the bottom of the fuselage and installation of six seats and sound proofing in the passenger cabin. No action had been taken on this request as of the close of the period. ~~(CONFIDENTIAL)~~ (U)

(Uncl) Personnel. One qualified officer is still needed for the position of Electronics Instructor in the ATI School. The relatively rapid turn-over among instructor personnel continued to be a problem. (Uncl)

(Uncl) Requirement for Foreign Aircraft. The ATI School needs late types of foreign aircraft which can be used for the instruction of students. Most of the newer equipment used in the field problem is of American manufacture. The Technical Services Division has been exploring the possibility of getting the MIG-15 assigned to the Center for use in the ATI School. (Uncl)

TECHNICAL ANALYSIS DIVISON

(ATIA)

TECHNICAL ANALYSIS DIVISION

I. ORGANIZATION, FUNCTIONS, AND KEY PERSONNEL

During the reporting period the Plans, Operations and Administrative Office was abolished and an Administrative Office and a Plans and Operations Office were established.[1] Major James W. Tisdale and Major James A. Povalski were reassigned to the Plans and Operations Office for duty as Special Project Officers.[2] Major John H. Westenhoff was relieved from assignment as Executive Office of the Division, 3 August 1954, for the purpose of attending Air Command and Staff School.[3]

Major Roger J. Groseclose, who had reported to ATIC from duty as an ATL Officer in Germany, was assigned as Executive Officer of the Division on 3 August 1954.[4]

Lieutenant Colonel Harry F. Bunze, Chief of the Aircraft and Propulsion Branch, was relieved from assignment on 6 August 1954, and transferred to Headquarters, WADC, Wright-Patterson AFB.[5] Mr. Isadore Herman, Branch Technical Advisor, was assigned Acting Chief.

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1. 1125th USAF FAG (ATIC), GO 17, 15 Jul 54.
2. 1125th USAF FAG (ATIC), PERAM 46, 23 Jul 54.
3. 1125th USAF FAG (ATIC), SO 95, 22 Jul 54.
4. 1125th USAF FAG (ATIC), PERAM 50, 3 Aug 54.
5. 1125th USAF FAG (ATIC), SO 79, 23 Jun 54.

Major Otis B. Thornton, Chief of the Aircraft Section, was relieved from assignment 30 July 1954 for the purpose of attending a two year course at USAF Institute of Technology.[6]

Lieutenant Colonel James C. Manatt was assigned as Chief, Guided Missiles Section, 28 July 1954, relieving Captain Perry H. Pratt.[7] Lieutenant Colonel Manatt reported to ATIC from Hollaman Air Development Center, New Mexico.

One civilian, GS-11, declared surplus during the last reporting period, was transferred to the Procurement Division, Wright-Air Development Center.

The division lost one officer (Captain) authorization due to reduction in force directed by D/I, USAF.

Total authorized and assigned strength for the Technical Analysis Division at the close of the period was:

	Civilians	Officers	Airmen
Authorized	114	43	8
Assigned	108	45	10

Key personnel assigned at the end of reporting period were:

Chief, Technical Analysis Division	Colonel Wayne L. O'Hern
Deputy Chief	Colonel Ray W. McDuffee
Executive Officer	Major Roger J. Groseclose
Technical Advisor	Mr. Charles Zimmerman
Chief, Plans and Operations Office	Mr. Miles E. Goll

6. 1125th USAF FAG (ATIC), SO 98, 30 Jul 54.

7. 1125th USAF FAG (ATIC), PERAM 48, 28 Jul 54.

Chief, Administrative Office	Mary Margaret McKenna
Chief, Aircraft and Propulsion Branch	Mr. Isadore Herman (Acting)
Chief, Electronics Branch	Lt Col Harry C. Johnston
Chief, Weapons and Industry Branch	Mr. Nicholas Post

II. ACTIVITIES, EVENTS, AND PROBLEMS

During the last half of 1954, the Technical Analysis Division concentrated on carrying to a conclusion the analysis and study of actual items of equipment acquired prior to this reporting period. (Uncl)

A reassessment was made of the project activities involving the principal contractor, Battelle Memorial Institute (Project Stork). Changes were made in administrative controls, approval of requirements, and material screening processes. (Uncl)

In the detailed descriptions of projects which follow, projects are grouped generally by subject instead of by project number sequence. (Uncl)

A table summarizing quantitatively the division's project activity for the reporting period is included at the end of this section.[8] (Uncl)

(Uncl) ANALYSIS OF FOREIGN AIR TECHNICAL CAPABILITIES.[9] This project was established primarily to utilize the services of the Battelle Memorial Institute, Columbus, Ohio, which provides the ATIC with scientific research and analytical services under an open-end, omnibus contract to supplement and support the efforts of ATIC personnel. The reports furnished by Battelle provide basic data for ATIC intelligence products. (~~CONFIDENTIAL~~) (U)

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8. Page 109, infra.

9. Project 9974, contract let 17 Apr 51. See page 8, supra.

(Uncl) AIRCRAFT:

(Uncl) MIG-15:

Preliminary plans were made during the period to combine all the data obtained on the MIG-15, under various separate projects, into a summary technical report.[10] Very little progress, however, was made during the period toward implementing these plans for the MIG-15 story. (Uncl)

The most recent MIG-15 received at the Wright-Patterson Air Force Base,[11] the "Zeta" MIG, delivered by the North Korean pilot to the United Nations Forces after the cease-fire truce, and initially examined at Okinawa, was thoroughly examined and tested. The surface was checked to determine effects of the salty atmosphere in which it had been for approximately two months. The engine was removed, completely disassembled, examined, and reassembled for subsequent flight test. Instruments were installed to obtain performance data, together with a USAF oxygen system, VHF communications system, and a harness to insure pilot safety. (~~CONFIDENTIAL~~) (U)

Following the completion of tests at the Wright-Patterson Air Force Base, the MIG was sent to Eglin Air Force Base, 22 March 1954, for technical evaluation tests. Tests at Eglin AFB included comparisons with the USAF B-47, B-36, F-86, and F-84, and tests of the MIG's reflection quality against infra-red detection devices, requested by the Wright Air Development Center. The MIG was returned to the Wright-Patterson Air Force Base the latter part of October 1954 for additional flight testing.

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10. Proposed Project 10207, 7 Dec 54, awaiting decision. Original MIG-15 project No. 10115, to be incorporated in this new project, if approved.

11. Received in January 1954.

Report of the Eglin tests was being prepared by the Air Defense Division of the Air Force Operational Test Center, Air Proving Ground Command, Eglin AFB, but had not been received by the end of the period. ~~(CONFI-DENTIAL)~~ (U)

Upon return of the MIG to Wright-Patterson AFB, after 180 hours of flight, the engine was again disassembled, reinspected, and repaired. Work was completed and the MIG made ready for flight by the first week of December 1954. (Uncl)

In December 1954, three flights were made for additional tests of infra-red feasibility, at the request of the WADC Armament Laboratory. On 24 December 1954, a program consisting of 15 flights for tactical evaluation of the aircraft by Navy personnel from Patuxint River, Maryland, was started, and five of these flights were completed by the end of the year. Lack of suitable flying weather prevented more flights. ~~(CONFIDENTIAL)~~ (U)

Technical reports on the MIG-15[12] distributed during the period included:

TR-AE-33, (Uncl) "Analysis of the Bullet-Resistant Windshield in MIG-15," 26 May 1954, distributed 23 August 1954. (Uncl)

TR-AE-48, (Uncl) "Systems Coding of the MIG-15," 9 February 1954, distributed 6 July 1954. (Uncl)

TR-AE-51, (Uncl) "Electrical Power System of the MIG-15 Aircraft," 25 March 1954, distributed 30 August 1954.(Uncl)

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12. Project 9975, (Uncl) "Processing of Foreign Equipment," which is a continuing project established to accomplish the initial examination of foreign equipment and to report the results of preliminary examination of significant items. ~~(CONFIDENTIAL)~~ (U)

TR-AE-55, (Uncl) "MIG-15 Actuating System", 17 May 1954, distributed 30 November 1954. (Uncl)

TR-AE-59, (Uncl) "MIG-15 Instrumentation", 9 June 1954, distributed 28 October 1954. (Uncl)

Another technical report on the VK-1 turbojet engine contained in the "Zeta" MIG has been completed and will be issued early in the next period.[13] (Uncl)

(U) ~~(CONFIDENTIAL)~~ MIG-15 Pilot's Operating Manual.[14] In November 1954, work was resumed on preparing a pilot's manual for flying a MIG-15. This project, established in 1952 at the request of the Strategic Air Command, through the Director of Intelligence, had been in deferred status since 1953. This manual will enable USAF pilots, captured or forced down in Soviet controlled territory, to escape should they be able to commandeer a MIG. Target date for publication has been set for 15 April 1955. ~~(CONFIDENTIAL)~~ (U)

(U) ~~(CONFIDENTIAL)~~ MIG-17 (FRESCO).[15] Additional information obtained during the 20 June 1954 Soviet Air Show necessitated revision of the performance calculations based on the May Day, 1954 observations and contained in ATI Study No. 102-AC-54/2-34. The June observations revealed an after burner installed in this aircraft. Revision of calculations

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13. TR-AC-42, (U) ~~(CONFIDENTIAL)~~ "Inspection and Performance Calibration of a Soviet VK-1 Turbojet Engine", completed October 1954, scheduled for distribution January 1955. Report classified SECRET. Work performed under Project 10187.

14. Project 10135, (U) ~~(CONFIDENTIAL)~~ "Special Study of USSR Aircraft for Escape and Evasion Bulletin", April 1952.

15. Project 10180, (U) ~~(CONFIDENTIAL)~~ "Preliminary Analysis of the Soviet Type-38 Aircraft", 5 Jan 54.

were 60 percent complete at end of reporting period. When finished, these revisions will be distributed as amendments to the basic study. (~~CONFIDENTIAL~~) (U)

(Uncl) TU-4 Bomber.[16] This research has been deferred indefinitely until additional data on the engine performance of this aircraft necessitates revision of the existing study, I/D Study No. 102-AC-50/36-34. (Uncl)

(U)(~~CONFIDENTIAL~~) MI-4 Helicopter (HOUND):[17]

The Type-36 helicopter was identified as the Soviet MI-4 in October 1954. It was also discovered during the period that the size of this aircraft was greater than previously estimated. By the close of the period it had been determined that the rotor diameter was about 25 percent greater than the 56.5 feet previously estimated. Preliminary analysis indicated that other dimensions will also be somewhat greater, although in smaller proportion. The GAZ-69 vehicle, known to have been carried in this aircraft at the 1954 Tushino Air Show, could not have been encompassed by the previous width estimate for the fuselage of the HOUND. Estimates of the load carrying capacity of the HOUND, however, were not revised, since they were based on demonstrated capacity. (~~SECRET~~) (U)

The first indication of greater size was revealed by cabled reports

16. Project 10176, (Uncl) "Soviet TU-4 Bomber", July 1954.

17. Project 10188, (~~CONFIDENTIAL~~) (U) "Preliminary analysis of the Soviet Type-36 Helicopter", 12 Feb 54: Code designation, HOUND, assigned to aircraft September 1954. (~~CONFIDENTIAL~~) (U)

of the June 1954 Tushino Air Show.[18] The written reports of this air show, received in August 1954, confirmed this surmise. In November 1954, information supplied by the U. S. Army identified the GAZ-69 truck carried in the HOUND and gave the truck's weight and dimensions. On 3 December 1954, clear flight photographs of the HOUND as it appeared in both the 1953 and 1954 Soviet air shows, together with vertical aerial photographs, showing the HOUND on the ground, were received. The vertical photographs were most useful in estimating the greater size of the HOUND. (C)

Because of this later information, work on the study announced in the preceding edition of the ATIC History was suspended.[19] However, identification of the MI-4 was announced in SIRAB, No. 230, 29 November 1954, and revised conclusions concerning this aircraft were announced in the ATIC BULLETIN, 24 December 1954. In addition, an article was submitted to the AIR INTELLIGENCE DIGEST in October 1954 which will probably be published in the January 1955 issue. This article discussed the probability that this helicopter utilized some ground run in order to take off in the loaded condition. (C)

(Uncl) YAK-23. TR-AE-56 (C) "YAK-23 Actuating System", 19 May 1954, was distributed 28 October 1954,[20] and TR-AE-58, (C) "YAK-23 Fuel Systems", 13 July 1954,[21] was distributed 21 December

18. ATIC Bulletins, 8 Oct and 3 Dec 54.

19. History of the Air Intelligence Center, 1 Jan - 30 Jun 54, Page 87.

20. Project 9975. Page 66, supra.

21. Project 9974, 17 Apr 51. Page 64, supra.

Another technical report and a film, "Project Alpha",[22] have been completed but have not been released because of question as to sensitivity of the subject matter. ~~(SECRET)~~ (U)

(U) ~~(CONFIDENTIAL)~~ Type-31 Bomber.[23] Analysis of this aircraft was deferred until more information is obtained. Decision will be made later whether to close this project or revise the existing study, ATI Study No. 102-AC-53/13-34, 31 March 1954.[24] (Uncl)

(U) ~~(CONFIDENTIAL)~~ Type-37 Aircraft (BISON).[25] Preliminary analysis of this aircraft was completed. Proposed study has been written and was in coordination at the end of the period. (Uncl)

(U) ~~(CONFIDENTIAL)~~ Type-39 (BADGER) Aircraft.[26] Analysis was completed and proposed ATIC study[27] drafted. The study was in coordination at the end of the period. (Uncl)

(Uncl) Soviet Aircraft Maintenance System.[28] Before the study on this subject, completed 23 August 1954, could be sent for publication, a

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22. Project 10178, (Uncl) "Project Alpha", 26 Oct 53: The report under question was TR-AC-28 (~~CONFIDENTIAL~~) "Evaluation of the YAK-23".

23. Project 10160, (U) (~~CONFIDENTIAL~~) (U) "Analysis of Type-31 Bomber", 27 Jun 52.

24. (Uncl) ATI Study No. 102-AC-53/13-34, 31 Mar 54.

25. Project 10195, (U) (~~CONFIDENTIAL~~) "Analysis of Soviet Type-37 Aircraft", 27 May 54. ATI Study No. 102-AC-54/4-34 proposed. Designation "BISON" is tentative. (~~CONFIDENTIAL~~) (U)

26. Project 10196, (U) (~~CONFIDENTIAL~~) "Analysis of Soviet Type-39 Aircraft", 27 May 54. Designation "BADGER" is tentative. (~~CONFIDENTIAL~~) ATI Study No. 102-AC-54/5-34. (U)

27. (U) (~~CONFIDENTIAL~~) "Preliminary Analysis of Soviet Type-31 Aircraft".

28. Project 10143, (Uncl) ATI Study No. 102-AC-54/3-34 to be issued.

decision was made to completely revamp it. Accordingly, a new plan was prepared, which was approved 8 November 1954, but work on the revision had not started by the end of the period. (Uncl)

(Uncl) Boundary Layer Control Devices.[29] Analysis of the effect of boundary layer control devices on the performance of Soviet aircraft was practically at a standstill during the period. It was hoped to be able to complete a summary report on this subject by 1 April 1955. (Uncl)

(Uncl) AIR-WEAPON TREND STUDIES:

There was some progress in the individual projects classed under this general subject. (Uncl)

Approximately 50 percent of the preliminary work was completed for estimating the development of Soviet fighter aircraft[30] and a start was made on a similar study of Soviet bombers.[31] Significant information and conclusions on the range and radius of Soviet glider-towplane combinations were included in the material contributed by the ATIC to AIR INTELLIGENCE STUDY 2-15.[32] (Uncl)

In the field of guided missiles, no further data were developed on Soviet surface-to-air missiles since the publication of NATIONAL INTELLIGENCE ESTIMATES 11-6-5 in which appeared performance data developed by the

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29. Project 10144, (Uncl) "Potentialities of Boundary Layer Control Devices on Soviet Aircraft", 12 Feb 52.

30. Project 10190, (Uncl) "Estimated Development of Soviet Fighter Aircraft", Feb 54.

31. Project 10192, (Uncl) "Estimated Development of Soviet Bomber Aircraft", Feb 54. Project 10118 will be merged with 10192.

32. Project 10141, To be merged with 9968 (Uncl) "ATIC Contribution to AIS 2/15/1".

ATIC. These figures have been quoted in a number of recent Department of Defense publications.[33] (Uncl)

Sufficient information was obtained to warrant the publication of an ATIC study on Soviet surface-to-surface guided missiles with 2500 nautical miles minimum range. Work on this study had not been completed by the end of the period.[34] (~~CONFIDENTIAL~~) (U)

The ATIC's project concerning Soviet guided missiles with mass destruction warheads, launched from aircraft, ship, or submarine, was cancelled because a Navy intelligence report, published in 1952, contained similar information.[35] (~~CONFIDENTIAL~~) (U)

The lack of sufficient data prevented any progress being made in the study of Soviet air-to-air refueling capabilities.[36] (Uncl)

A special report on the development of certain U. S. heavy bomber prototypes was distributed on a limited basis in October.[37] (Uncl)

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33. Project 10182, (Uncl) "Soviet Surface-to-Air Guided Missiles".

34. Project 10139, (Uncl) "Soviet Surface-to-Surface Guided Missiles": ATI Study No. 102-AC-53/11-34 under preparation. (Uncl)

35. Project 10138, cancelled 30 Sep 54.

36. Project 10157, (Uncl) "Soviet Air-to-Air Refueling Capabilities", 1952.

37. Project 9974, 17 Apr 54, See page 64, Special report No. 8 distributed, (Uncl), "A Study of the Development of Selected U. S. Heavy Bomber Aeroplane Prototypes", 1 Oct 54.

(Uncl) GUIDED MISSILES:

(U)(SECRET) Project Draggle:

In addition to the guided missile activities reported under"Air-Weapons Trend Studies", a study on guided missile sites was released and Project Draggle[38] was established in October 1954. This project was designed to cover ATIC participation in the Air Research and Development Command's project for developing a long range reconnaissance radar that will serve as another means of acquiring information on foreign guided missiles. The ARDC project has been assigned the secret code word, "Draggle". (SECRET) (U)

The ATIC part in this joint project to date has consisted of serving as a member of the technical steering committee that is advising the contractor, General Electric Company, on the development of this radar; the ATIC being the advisor on the intelligence requirements for such equipment. Plans have been made for ATIC to participate in analyzing the intelligence data that may be collected with this equipment. (SECRET) (U)

Before the official code word was assigned, this project was referred to by a variety of popular terms, such as "Billboard", "Railroad", and "Rag Mop". (Uncl)

By the end of the period, erection of a domestic test installation, probably in the vicinity of El Campo, Texas, had been approved. (CONFIDENTIAL) (U)

38. ATI Study No. 102-AC-54-11/34, (U) (SECRET) "Possible Surface-to-Air Guided Missile Sites in the Moscow Area": Project 1021, originally designated "Railroad Radar", 6 Oct 54.

(Uncl) POWER PLANTS (ENGINES):

(Uncl) ASH-62IR Engine.[39] TR-AC-25, (Uncl) "Soviet ASH-62IR Aircraft Power Plant Performance Characteristics", was distributed in July 1954. Additional tests of this engine using Soviet fuel had to be deferred until a later date. (Uncl)

(Uncl) VK-1 Engine. The work accomplished on analysis of this engine has been included in the MIG-15 research.[40] (Uncl)

(Uncl) VK-107A Engine.[41] An attempt was made to secure additional Soviet fuel with a 99/115 octane rating for use in further testing of this Soviet engine to determine its detonation limits. When only 99/127 fuel could be obtained, arrangements were made with Gulf Oil Company to blend this fuel back to the 99/115 rating, but these plans were held in abeyance until the initial supply of 99/115 fuel was exhausted. Results obtained from the tests using the initial supply of 99/115 fuel revealed little additional intelligence information would be gained by continuing the 99/115 fuel testing program. Therefore, the plan to convert 99/127 fuel to 99/115 fuel was abandoned. A summary report of the entire research on the VK-107A engine was under preparation at the end of the period. This report contains comparisons to U. S. engines of comparable design and horsepower. ~~(CONFIDENTIAL)~~ (U)

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39. Project 10101, 16 Jun 51.

40. Project 10187.

41. Project 10105, 15 Jun 51.

(Uncl) Rocket Power Plant Developments.[42] A study on Soviet rocket power plants was completed 23 August 1954 and a technical report on French rocket power plants, 22 November 1954. Both were being coordinated at the end of the period. (Uncl)

(Uncl) RD-500 Turbojet Engines.[43] Release of the technical report on this engine completed this project which was formally closed 18 August 1954. (Uncl)

(Uncl) JUMO 022 Turbojet Engine.[44] The technical report, reported in publication at the close of the preceding period, was cancelled to permit issuance of an intelligence study on the same subject. Drafting of the study was completed 22 November 1954. Completion of coordination and publication was set for March 1955. (Uncl)

(Uncl) Turbojet Engines in BISON and BADGER Aircraft.[45] The project on this subject was approved 3 December 1954. An intelligence study has been drafted and will be coordinated early in the next period. (Uncl)

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42. Project 10165, 20 Nov 52

43. Project 10186, 2 Dec 51. TR-AC-42, (~~CONFIDENTIAL~~ (U)) "Inspection and Performance Calibration of a Soviet RD-500 Turbojet Engine" distributed, 25 Jul 54

44. Project 10193, (Uncl) "Soviet JUMO 022 Turboprop Engine Development and Production Capabilities", 25 Mar 54. Proposed TR-AC-37 changed to proposed ATI Study No. 102-AC-54/8-34, same title as the project.

45. Project 10200, (Uncl) "Estimated Turbojet Engine in BISON and BADGER Aircraft", 3 Dec 54. (Uncl) ATI Study No. 102-AC-54/9-34, same subject, planned.

(U) ~~(CONFIDENTIAL)~~ "Soviet Turbojet Engine No. 26883, Series 6."[46] This project was completed with distribution of ATIC report TR-AC-33, (Uncl) "Evaluation of Improved Soviet Turbojet Engine", dated 28 October 1954. Project closed 12 November 1954. ~~(CONFIDENTIAL)~~ (U)

(Uncl) "Interpolation of Performance for Ramjet and Pulsejet Engines".[47] This project was closed 27 October 1954 because there was no immediate need for information of this type. (Uncl)

(Uncl) Turbojet Engines of Friendly Nations.[48] This project was proposed in December 1953, but was not approved by the Commander. In November 1954, the project proposal was returned for revision and resubmission. Higher priority work prevented completion of a revised plan for this research. (Uncl)

Other engine projects proposed during the period, but not approved by the end of the period, included:

Project 10202, (Uncl) "Soviet Turbine Engines in Lyulka Design", proposed 19 October 1954. (Uncl)

Project 10203, (Uncl) "British Turbojet Engines: Production, Service, and Developments", proposed 2 December 1954. (Uncl)

Project 10206, (Uncl) "Turbojet Engine Design and Performance Analysis", proposed 2 December 1954. (Uncl)

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46. Project 10179. TR-AC-33, (Uncl) "Evaluation of Improved Soviet Turbojet Engine", distributed 22 Oct 54.

47. Project 10134.

48. Project 10189 (Tentative)

(Uncl) PROPELLER RESEARCH:

Three technical reports[49] prepared from data supplied by Hamilton Standard Propeller Company under contract AF33(038)-26090 were released on Soviet propellers.[50] (Uncl)

In November, Curtiss Wright Corporation, under contract AF33(600)-24034, completed materials data for inclusion in Technical Reports, TR-AC-20 on VISH-107-1o propeller, and TR-AC-38 on VISH-111-V-20 propeller.[51] Publication of this additional material was delayed because the contractor failed to submit original artwork with his report. (Uncl)

(Uncl) Development of Soviet Propeller and Propeller Control For Turboprop Engines. This new project was approved 19 October 1954. Preliminary work of collection and screening of intelligence documents on this subject had been started by the end of the period.[52] (Uncl)

(U) (~~CONFIDENTIAL~~) Photographic Means of Analyzing Propellers.[53] This is a revision of project 10192 to determine propeller efficiency by photographic means. It was proposed 18 October 1954. A conference was held with Colonel Malcolm D. Seashore, Chief of Technical Requirements Division, to discuss photographic collection requirements for this research. At the close of the period, the project had not been approved.

(~~CONFIDENTIAL~~) (U)

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49. TR-AC-34, (Uncl) "Soviet AV-5L-24 Propeller Analysis", 6 Aug 54: TR-AC-35, (Uncl) "Soviet AV-7N-161 Propeller Analysis", 10 Aug 54: TR-AC-36, (Uncl) "Soviet V-501-D-81 Propeller Analysis", 6 Aug 54.

50. Project 10107, 17 Jul 54.

51. Ibid.

52. Project 10198.

53. Proposed Project 10204, (U) (~~CONFIDENTIAL~~) "Determination of Propeller Efficiency by Photographic Means".

(Uncl) FUELS AND LUBRICANTS:[54]

On 1 November 1954, a contract was awarded to the Phoenix Laboratory, Inc, Chicago, Illinois, to analyze fuels and lubricant samples. By means of this contract, it was hoped to reduce the backlog of unanalyzed samples that had accumulated during 1954 and to prevent future backlogs from accumulating. (Uncl)

The study[55] of the samples analyzed in 1952 and 1953 was released 12 July 1954. The plan reported in the preceding edition of the History to issue quarterly reports subsequent to this study did not materialize because laboratory facilities were not available. (Uncl)

TR-AC-39, (Uncl) "Calculation of Theoretical Performance of the System Trithioacetaldehyde: WFNA", was distributed 15 October 1954. A formal study to be titled, (Uncl) "A Study of Some Chemical Compounds Investigated as Rocket Fuels by the Soviet Union", was being prepared at the end of the period. Another study, (Uncl) "Catalytic Cracking in the USSR", was also nearing completion.[56] (Uncl)

A new project on synthetic lubricants[57] was established in October 1954, and collation of data was started in December 1954. The time required to complete the study will depend upon how rapidly foreign documents containing this data can be translated. (Uncl)

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54. Project 10095, (Uncl) "Analysis and Evaluation of ATIC Foreign Aircraft Fuel and Lube Samples", 21 Mar 51.

55. ATI Study No. 102-AC-53/14-34, (~~CONFIDENTIAL~~ (U)) "Soviet Aircraft Fuels and Lubricants Sample Analysis Report".

56. Projects 10172, 16 Oct 53, and 10184, 23 Dec 53.

57. Project 10197, (Uncl) "Soviet Synthetic Lubricant Development for Turbojet Engine Lubrication", 28 Oct 54.

(Uncl) METHODS OF ANALYSIS (ENGINEERING DATA):

To facilitate the computation of engineering data required in intelligence analysis, a high speed digital computer was ordered for ATIC, which was scheduled for delivery in March 1955. When this computer is received, ATIC will no longer have to depend on the WADC for machine services of this nature. Preparation for utilization of this machine, accomplished during the period, included sending a man to the factory to learn how to maintain the machine, developing methods and setting up problems for machine solution, and training research personnel in use of the machine. (Uncl)

Specific projects pertaining to methods of analysis progressed as follows:

(Uncl) Aircraft Group Performance Data.[58] The time devoted to preparation for use of the computer prohibited much work being accomplished on the handbook that was being prepared under this project. (Uncl)

(Uncl) Weight Estimation.[59] Methods of estimating aircraft weights and AMPR (empty airframe) weights were refined by including additional data pertaining to both foreign and domestic aircraft, collected during the period. (Uncl)

(Uncl) Performance Calculation Methods for Guided Missiles.[60] As soon as a handbook on these methods can be compiled, the project will be closed. No progress was made in compiling this handbook during the period. (Uncl)

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58. Project 10092, 16 Mar 51.

59. Project 10158, 7 Jul 52.

60. Project 10152, 9 Jun 52.

(Uncl) ATIC CONTRIBUTIONS TO OTHER PUBLICATIONS:

(Uncl) FAIS 2-14/1.[61] A project was initiated late in the preceding period to supervise and correlate the ATIC contribution to Force Air Intelligence Study 2-14/1, "Soviet-Bloc Long-Range Aviation". Appendix B, "Long-Range Aviation Weapons and Equipment", the ATIC contribution, was completed 20 September 1954. The project was then placed in deferred status until the next revision is due. (~~SECRET~~) (U)

(Uncl) FAIS 2-Z.[62] Plans were made for completion of the ATIC part of the next revision of this study, due 24 January 1955. (Uncl)

(Uncl) AIS 2-15/1.[63] Inasmuch as no requirements were placed on ATIC for contributions to Air Intelligence Study 2-15/1, this project was in deferred status during the period. On 13 December 1954, however, the ATIC coverage was broadened to include contributions on transport and glider aircraft and airborne support. (~~CONFIDENTIAL~~) (U)

(Uncl) NIS.[64] ATIC contributions to National Intelligence Studies, accomplished during the period, included material on Bulgaria and Yugoslavia (Chapter VII), material for sections 70 and 71 on the USSR chapter, and materials for section 17 on Sweden and Denmark. (~~CONFIDENTIAL~~) (U)

(Uncl) NIE.[65] The ATIC contributed to National Intelligence Estimates 21-55, "Probable Developments in the UK", and 22-54, "Probable Developments in France". (~~CONFIDENTIAL~~) (U)

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61. Project 9965, approved 18 Aug 54.
62. Project 9969.
63. Project 9968.
64. Projects 10175 and 10170. Project 10170 was closed 30 Sep 54.
65. Project 10194, 9 Apr 54.

(Uncl) ELECTRONICS:

(Uncl) Signal Analysis:[66]

Continued effort has been devoted to phasing the various activities of this project into separate projects to facilitate the work. (Uncl)

The analysts have concentrated on the analysis of data from regular and special ferret missions. There has been a backlog in this work and considerable effort was made to bring it up-to-date. ~~(SECRET)~~ (U)

A contract was awarded to Telechrome Manufacturing Corporation for a Video Recorder.[67] (Uncl)

The Aeronautical Research Laboratory of WADC has made available the OARAC Computer to compute data to determine the area of usefulness of direction finding by time measurements.[68] ~~(SECRET)~~ (U)

A contract was let for construction of a digital pulse analyzer which will automatically print pulse recurrence frequency, beam width, and scan rate directly from an audio recording of a scanning radar.[69] The first machine received under this contract was unsatisfactory and was returned for re-design. ~~(CONFIDENTIAL)~~ (U)

Considerable effort was spent on machine processing of electronic signals data. Conferences were held with all interested Air Force Commands and agencies and a standard IBM card arrangement was adopted. Computer techniques were finalized. A modified BOSCAR Model "C" machine was received and is now in operation, reducing data taken on the RRB-29 aircraft.

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66. Project 20024: See History of ATIC, 1 Jan 54 - 30 Jun 54, Page 108.
67. Future reports on Video Recorder will be handled under Project 20093.
68. History of ATIC, 1 Jan 54 - 30 Jun 54, Page 109.
69. Ibid.

A Telereder and a Telecordex, made by Telecomputing Corporation, has been delivered to Strategic Air Command. They have been using these machines for reducing AN/APD-4 data. WADC has made plans to run a time and motion study on the two machines to evaluate their various features. Plans were also made to compare the CP-216, being developed for Federal Telecommunications Laboratory, with the other devices, all of which use IBM card output. ([redacted]) (U)

A contract was made with Haller, Raymond and Brown Company for low frequency antennas to extend the frequency range of the special Crystal Video Receiver installation. These antennas have been completed, tested and shipped by the contractor. ([redacted]) (U)

(Uncl) Countermeasures Consulting Services.[70] Field tests concerning new methods of collecting guided missile information was nearly completed during the period. No evaluations had been made at the close of the year. ([redacted]) (U)

(Uncl) Instrumentation of Exploratory Type Electronic Reconnaissance Aircraft ERB-29:[71]

The aircraft instrumentation has been completed, flight tested, and a number of minor modifications made as a result of early flight test. (Uncl)

In general, the equipment installed in the aircraft has lived up to its expectation, and final flight testing was continued up to the close of the year. ([redacted]) (U)

70. Project 20062: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 112.

71. Project 20067: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 110.

ATIC has been very active in obtaining special devices for installation on this aircraft. ATIC has also aided in the flight testing of the electronic equipment. Phase I flight test, which covers the acceptance of the aircraft, has been completed and a portion of the Phase II flight test, involving its capabilities as a ferret aircraft, was in process at the end of the period. An evaluation of intercept operations was to be made on the data collected during these flight tests.[72] ~~(CONFIDENTIAL)~~ (U)

(U) ~~(CONFIDENTIAL)~~ Evaluation and Modification of AN/PRR-4 Electronic Intercept Receiver.[73] In accordance with the recommendations reported in the previous period, the contractor was asked to construct a breadboard or prototype receiver on the basis of the experience gained with the AN/PRR-4. Work on the new type was initiated and a delivery date was set for about 1 March 1955. ~~(SECRET)~~ (U)

(Uncl) Collection and Analysis of LF and VLF Data:[74]

During this period a team was assembled, comprised of representatives from Stanford Research Institute, Sperry Gyroscope Corporation, WADC and ATIC, together with special laboratory equipment to make actual field trials of new techniques to be employed in interception of significant pulsed transmissions. The trials were highly successful and have lead to a detailed long-range program. ~~(SECRET)~~ (U)

As a part of the long-range programming, an agreement was reached at a conference with USAFSS for ATIC to take complete responsibility for

72. Project 20072.

73. Project 20075: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 110.

74. Project 20078: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 111.

development of intercept facilities in the 10-500 Kc range, which will include development of equipment engineering of field facilities and experimental operation during the development stage. Upon completion of new equipment and techniques devised under this development program, USAFSS will assume full operating responsibility. ~~(SECRET)~~ (U)

A contract was initiated with Stanford Research Institute to undertake the necessary equipment development and conduct field tests of equipment to insure its adequacy for employment in the field. ~~(CONFIDENTIAL)~~ (U)

(U) ~~(CONFIDENTIAL)~~ Technical Intelligence Aspects of East-West Embargo Items.[75] ATIC continued to contribute comment on intelligence significance of electronic embargo items to the Department of Defense. ~~(CONFIDENTIAL)~~ (U)

(Uncl) Soviet Bloc Capabilities in Application of Infrared to Aerial Warfare:[76]

This project is designed to present all current information on the capabilities of the USSR and satellite nations in the field of infrared radiations applicable to aerial operations. The project was established toward the end of the last reporting period. (Uncl)

A study was completed 25 October 1954 which indicates that:

East Germany provides a valuable contribution to the Soviet military infrared potential. ~~(CONFIDENTIAL)~~ (U)

The Soviets now have the ability to produce optical materials satisfactory for military use in passive detection devices. Their technical capabilities in the field of passive infrared detection in

75. Project 20080: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 111.

76. Project 20081: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 108.

the medium wavelength region are the same as those in the United States. (~~CONFIDENTIAL~~) (U)

The Soviets have the scientific background to progress to other detectors, but production of these presents many difficulties and it is not considered likely that they will have any of these detectors in operation before 1958. (~~CONFIDENTIAL~~) (U)

No information has been received concerning the detection of far infrared radiation. (~~CONFIDENTIAL~~) (U)

(U) (~~CONFIDENTIAL~~) Interrogation of Returned German Specialists ("MOON").[77] This project is in the process of being closed. No work was accomplished during the reporting period. (Uncl)

(U) (~~CONFIDENTIAL~~) Machine Processing of Electronic Intercept Data:[78]

This new project is a supplement to an existing contract containing a new task which includes the study of machine processing of electronic intercept data. It is intended to fill the void presently existing in machine (IBM) handling of these data. (~~CONFIDENTIAL~~) (U)

A complete study of the requirements of machine processing of intercept data has been made, covering requirements of ATIC, SAC and Hq USAFSS. Various methods and machines available have been studied and feasibility of using this equipment has been determined. (~~CONFIDENTIAL~~) (U)

As a result of the above work, and a number of conferences held with interested parties, the complete program of machine handling of data was outlined. Efforts in this field indicate that all electronic intercept data may be handled in the future by machine processing. (~~CONFIDENTIAL~~) (U)

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77. Project 20083: History of ATIC, 1 Jan 54 - 30 Jun 54, page 112.

78. Project 20084.

(Uncl) WEAPONS AND INDUSTRY:

(Uncl) Status of the Technology of Aircraft Metallurgy in the USSR:[79]

One study was distributed in connection with this project during the period. (Uncl) "The Status of Aircraft Metallurgy in the USSR (Aircraft Quality Steels)" was released 14 September 1954.[80] (Uncl)

Another study, (Uncl) "The Status of Aircraft Metallurgy Research and Development",[81] was printed and forwarded for distribution late in December. (Uncl)

A third study in this project, (Uncl) "Status of Welding Technology in the USSR",[82] was reviewed within the Center and by interested components of WADC before being forwarded to D/I USAF for approval, which was received 9 December. At the close of the period it was in the process of reproduction. ~~(CONFIDENTIAL)~~ (U)

(Uncl) Investigation of Foreign Fire Control Equipment:[83]

Report TR-AE-21, entitled "Installation of Guns in Turrets of TU-4", was received from Emerson Electric Company, St. Louis, Missouri. This completed the contract with that firm.[84] ~~(CONFIDENTIAL)~~ (U)

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79. Project 30022: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 101.
80. ATIC Study No. 102-AE-53/5-34.
81. ATIC Study No. 102-AE-53/4-34.
82. ATIC Study No. 102-AE-54/3-34.
83. Project 30037: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 88.
84. Air Force Contract AF 33(600)-18147.

A request to extend the contract[85] with the Crosley Division of AVCO Manufacturing Corporation, Cincinnati, Ohio, was approved for the fiscal year 1955. One requirement under the contract with AVCO, a report of (~~CONFIDENTIAL~~) (U) "Soviet Air Gunnery Trainer AIP and AIK", was active during the period. It was approximately 85 percent complete at the end of the period. (~~CONFIDENTIAL~~) (U)

Requirement for report on (~~CONFIDENTIAL~~) (U) "Installation of an ARO Radar in the MIG-15, MIG-17 and future Soviet Interceptors" was forwarded to AVCO 18 November 1954. (~~CONFIDENTIAL~~) (U)

ATIC Technical Report, TR-AE-32, (Uncl) "MIG-15 Fire Control System", was distributed during the period. This report resulted from the utilization of information obtained from three other requirements placed on AVCO; report on "GSK-1500 Aircraft Generator", report on "Soviet Aircraft Generators", and use of the gunsight aim point camera mount built in simulated firing tests of MIG-15 in flight. (~~CONFIDENTIAL~~) (U)

(Uncl) Critical Production Factors in the Soviet Precision Industry.[86] The object of this project was to produce a staff study for very limited distribution which would indicate the criteria to be used in evaluating the Soviet level of technology in the precision industry category. The project was postponed for an indefinite period because of other higher priority projects, the excessive routine workload, and

85. Air Force Contract AF33(600)-24502.

86. Project 30042: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 106.

because it was believed that information to be secured from other projects could be used to judge the extent of further survey required and criteria to be developed in this project. Accordingly, this project was cancelled on 14 December 1954. (~~CONFIDENTIAL~~) (U)

(Uncl) Status of Soviet Synthetic Resins as Applied to Aircraft.[87] Distribution of ATIC Study 102-AE-53/10-34, (Uncl) "Status of Soviet Synthetic Resins as Applied to Aircraft" was accomplished on 8 July 1954. Since this completed the requirements of the project it was closed on 4 August 1954. (Uncl)

(Uncl) Aircraft Rubber Technology in the USSR.[88] Distribution of the basic study No. 102-AE-54/2-34 entitled (Uncl) "Aircraft Rubber Technology in the USSR" on 22 November 1954 and its separate appendix on 14 December 1954 completed the requirements of this project. The project was closed on 27 December 1954. (Uncl)

(Uncl) Soviet Capabilities in Aircraft Instrument Manufacturing.[89] Delivery of the coordination copy of a study from Project Stork was delayed until 26 August 1954 because of higher priority projects taking precedence through the coordination office at that facility. Although considerable revision of the report was necessary by the contractor prior to its being forwarded to ATIC, a review by the ATIC project

87. Project 30046: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 103.
88. Project 30049: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 103.
89. Project 30050: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 106.

engineer indicated additional re-write work was yet to be done. Accordingly, the report was returned to Project Stork in December 1954 with specific recommendations for changes. ([redacted]) (U)

(Uncl) Status of the Nuclear Energy Program in the USSR:[90]

This is a continuous-type project involving the collation and integration of information into the Technical Intelligence Processing System (TIPS) file at Project Stork at a pre-determined rate of effort. The first progress report of the contractor, (Battelle Memorial Institute) was issued 30 September 1954. This report indicated that about 28,900 entries into the TIPS file had been made from the 2,300 documents processed under this project to date. Extensive use was made of the information contained in this portion of TIPS file in preparing a study authorized under a work request on the Institute of Physical Problems imeni S. I. Vavilov, Moscow. This report was completed and delivered to ATIC in March 1954 for use of D/I USAF. (SECRET)

In connection with this project, ATIC personnel visited D/I USAF, Atomic Energy Commission, and the Department of State to coordinate various phases of project activity including a technical report prepared on the BISON and BADGER aircraft.[91] Arrangements were made for participation of an ATIC representative on an atomic energy working group under sponsorship of the Joint Atomic Energy Intelligence Committee. ([redacted]) (U)

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90. Project 30051: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 107.

91. ATIC Technical Report TR-AE-62.

An addendum to the basic project initiation proposal was submitted on 30 December 1954. This plan involves the incorporation of Project Stork related activity under "Integration of Information into TIPS", "Nuclear Power Reactor Materials Bibliography", and "Bibliographies and Biographical Reports of Soviet Physicists", with this project. Under this plan the work would be phased through December 1955 in an effort to determine the technical and scientific capability of the Soviet bloc countries to develop and utilize nuclear power plants either for aircraft or guided missiles. (~~SECRET~~) (U)

(Uncl) Status of the Technology of Aircraft and Guided Missile Instrumentation in the USSR and its Satellites:[92]

An interim report dated 15 July 1954 was received from the contractor, Battelle Memorial Institute, "Project Stork", during this period. After a review of this report, a revision of the original work request was forwarded to the contractor on 27 September 1954. It was apparent from the report that there was insufficient intelligence information on which to base separate reports on the state of the art in aircraft and missile instrumentation in Soviet and Satellite nations. For that reason only one report is to be required in fulfillment of this request. Coordination of this report by ATIC was set for 1 April 1954.

(~~CONFIDENTIAL~~) (U)

In addition to reviewing the activity of the contractor, the ATIC Project Monitor made a trip in July 1954 to West Coast aircraft

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92. Project 30057: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 91.

manufacturing facilities to secure background data pertinent to this project. ~~(CONFIDENTIAL)~~ (U)

(Uncl) Characteristics and Performance of the Soviet 23mm NR Automatic Aircraft Gun.[93] ATIC Technical Report TR-AE-34, entitled, (Uncl) "Analysis of Soviet NR-23 Automatic Aircraft Gun" was distributed on 7 September 1954. This fulfilled the requirements of the project and it was closed on 15 September 1954. (Uncl)

(Uncl) Development of Analog Ratios for Vacuum Tube Production Facilities.[94] Activity during this period was generally restricted to collation and integration of intelligence information by the contractor under the guidance of the ATIC Project Monitor. Discussions were held with Project Stork personnel in September and December, and a report was forwarded for coordination from that activity on 30 December 1954. ~~(CONFIDENTIAL)~~ (U)

(Uncl) Evaluation of Aircraft Equipment.[95] This project, which was initiated to monitor contract AF33(600)-24194 with the Stratos Division of Fairchild Engine and Airplane Corporation was cancelled on 8 July 1954 following expiration of the contract at the end of Fiscal Year 1954. This course of action was deemed advisable since utilization of the contractor had not been possible because of the unforeseeable lack of significant foreign material (pneumatic equipment) for analysis. ~~(CONFIDENTIAL)~~ (U)

93. Project 30061: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 89.
94. Project 30062: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 106.
95. Project 30063: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 118.

(Uncl) Status of Foreign Air Weapons Metallurgy:[96]

Four reports were received on this project from ATIC contractor, Battelle Memorial Institute. The Addenda Report on the USSR, (102-AE-54/4-34) was received 1 July 1954 and is being reviewed by ATIC with additions being made to include significant information from the "Summary" report previously received under ATIC Project 30022.[97] Reports on Czechoslovakia (102-AE-54/5-16), Hungary (102-AE-54/6-5) and East Germany (102-AE-54/7-23) were received in August and in December were approved by the Directorate of Intelligence for publication. (Uncl)

In addition to the work by Battelle Memorial Institute, a contract (AF33(600)-28412) with Dr. John P. Nielsen of New York University dated 24 August 1954 requested evaluation of specific items on call. A total of $3,000 has been alloted to the contract and two calls have been issued. Call Letter #1 was issued 1 October 1954 for an analysis of titanium sponge and evaluation of English digests of twenty-two foreign metallurgical articles. Call Letter #2 was issued 4 November 1954 and called for a letter report on an analysis of titanium sponge and powder samples. (CONFIDENTIAL) (U)

(Uncl) Status of Aircraft and Guided Missile Mechanical Equipment in the USSR and its Satellites:[98]

The first interim report originally planned for 15 April 1954, was received from the contractor, Battelle Memorial Institute, 23 July 1954.

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96. Project 30065: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 101.

97. Footnote 79 supra.

98. Project 30066: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 92

It was reviewed and on 21 September 1954 the future activity of the contractor was outlined in an addendum to the work request. One of the specific recommendations made, was to have a single report on both USSR and Satellite aircraft and missiles mechanical equipment issued by Project Stork. Coordination date of 30 June 1955 with a cut-off date of 15 March 1955 were specified. Western Europe nations coverage was deleted from the requirements. ([redacted]) (U)

During this reporting period four unedited, informal sets of translations of foreign technical documents on the subject of mechanical equipment and systems were forwarded by Project Stork to the ATIC Project Monitor. ([redacted]) (U)

On 9 November 1954 an additional requirement was imposed on the contractor for the submission to ATIC of all presently available data on Soviet research, development, test facilities and personalities engaged in research, development and testing of equipment covered by this project. ([redacted]) (U)

(Uncl) Foreign Aircraft and Guided Missile Equipment Data.[99] During this period it became apparent that sufficient information had been received to warrant publication of a handbook on this subject, and accordingly, activity was stepped up and directed toward that end. ([redacted]) (U)

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99. Project 30067: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 115.

(Uncl) Status of Development of Soviet and Satellite Aerial Photographic Reconnaissance Equipment.[100] This project resulted in the distribution of an ATIC Study (102-AE-54/1-34) in August 1954 and represented the efforts of the contractor, Battelle Memorial Institute, as well as ATIC. During this reporting period Project Stork personnel visited the Library of Congress in July and Director of Intelligence in October to coordinate their previous findings with the information available to complete the report planned under this work request. The work request was modified in September 1954 to include requirement for only one report, on both USSR and its Satellites, to be received in ATIC for coordination 1 March 1955. (~~CONFIDENTIAL~~) (U)

(Uncl) Status of the Technology of Aircraft and Guided Missile Electrical Equipment in USSR and Other Countries.[101] An interim report on the status of work at the contractor's facility was received in ATIC on 2 July 1954. Further action on this work request was outlined by ATIC in a written comment to Project Stork dated 25 September 1954. Specifically, it was proposed that Project Stork prepare one report on the research and development capability of the Soviet bloc nations in the field of aircraft and missile electrical equipment. It was further proposed that the closing date for information to be included in the report be 31 December 1954, and that a coordination copy of the report be made available to ATIC on 30 April 1955. (~~CONFIDENTIAL~~) (U)

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100. Project 30068: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 93.

101. Project 30069: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 92.

(Uncl) Evaluation of Aircraft Equipment (Bendix Aviation Corp).[102] This $1.00 a year call type contract (AF33(600)-26266), was extended for one year on 1 July 1954. This contract, which provides for the examination of foreign landing gear and engine control equipment, remained dormant during the current reporting period through lack of significant material. (CONFIDENTIAL) (U)

(Uncl) Analysis of Soviet N-37 Automatic Aircraft Gun.[103] ATIC Technical Report TR-AE-35, entitled (CONFIDENTIAL) "Analysis of Soviet N-37 Automatic Aircraft Gun" was distributed 15 July 1954. This completed the requirements of this project and it was closed 29 July 1954. (CONFIDENTIAL) (U)

(Uncl) Western Europe Metallurgical Research Capabilities.[104] This project was designated to examine the capabilities of West European nations in the field of metallurgical research. As a result of work on this project, ATIC Technical Report TR-AE-65, entitled (Uncl) "Air Weapons Metallurgical Capabilities of Western Europe" was in the coordination stage at the end of the period. (Uncl)

(Uncl) Evaluation of Research and Development in Synthetic Resins and Elastomers in USSR and Satellites.[105] Work on the initial phases of this project was accomplished by Battelle Memorial Institute.

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102. Project 30070: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 118.
103. Project 30076: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 90.
104. Project 30077: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 102.
105. Project 30078: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 103.

A coordination copy of a report on Soviet satellites was received 1 October 1954. It was reviewed and a decision was made to publish it only after prominent scientific and technical personnel in industry have reviewed it and submitted recommendations. Delivery of a final report on the USSR was set by the contractor for 1 February 1955. ~~(CONFIDENTIAL)~~ (U)

(Uncl) Foreign Production Status of Titanium:[106]

This new project was initiated 8 July 1954 to ascertain the present and future status of foreign titanium technology on a world-wide basis to better satisfy Scientific Estimates Committee (SEC) and Joint Technical Intelligence Services (JTIS) requirements. As stated in the project plan, the foreign status of titanium technology is significant to the air technical intelligence and research and development missions since this metal, when utilized, will exert a significant bearing on the operational performance of future air weapons, as well as conserve critical materials. ~~(CONFIDENTIAL)~~ (U)

Definite dates for submission of reports were not planned, although letter reports to the Director of Intelligence and SEC will be required annually. (Uncl)

A lecture, presented to the Assistant Secretary of Defense for Research and Development, was given limited distribution on 13 August 1954 as ATIC Technical Report TR-AE-61 entitled (Uncl) "Lecture on Foreign Status of Titanium". (Uncl)

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106. Project 30079.

(U) (~~CONFIDENTIAL~~) Adaptability of the Soviet Aircraft Industry to Heavy Bomber Production:[107]

A report from the contractor, Battelle Memorial Institute, was received on 17 November 1954. This report, together with a trip report dated 21 January 1954, were considered sufficient to fulfill the contractor's obligations under the initial work request. Further utilization of this information by ATIC in either a technical report or estimate was planned by the project monitor. (~~CONFIDENTIAL~~) (U)

ATIC obtained an analysis of the producibility of a heavy bomber apparently soon to be produced in the USSR from Boeing Aircraft Company. This analysis plus a similar analysis by Douglas Aircraft Company, will be used with the Project Stork trip report as the basis for a technical report. (~~CONFIDENTIAL~~) (U)

(Uncl) Evaluation of the Swedish KH-29 Universal Gyroscope.[108] Publication of a technical report giving the results of WADC evaluation and testing of this gyroscope was originally planned for October 1954. The test program, however, has been delayed by lack of an adequate power source and a translation of technical data on the instrument. (~~CONFIDENTIAL~~) (U)

(Uncl) Evaluation of a Foreign Aircraft Weapon.[109] The French 30GF 30mm Aircraft Gun, to be evaluated by Armour Research Foundation under contract AF33(600)-28834, was received on 27 October 1954.

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107. Project 30080: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 105.
108. Project 30081: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 92.
109. Project 30082: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 90.

Ordnance Engineers of the French Government visited ATIC on 9 December 1954 and briefed personnel of ATIC and the contractor on the gun. The gun, spare parts, tools, and ammunition were delivered to Armour on 15 December 1954 and firing tests were planned to begin on 10 January 1955. ~~(CONFIDENTIAL)~~ (U)

(Uncl) Consultation on Foreign Aircraft Armament.[110] This project was initiated 20 July 1954 to obtain consultation services and exchange of information regarding armament systems development through the medium of a $1.00 per year contract with the Hughes Aircraft Company. A purchase request was initiated 15 July 1954 and the contract was signed in December 1954. (Uncl)

(Uncl) Evaluation of Research and Development in Ceramics and Cermets in Significant Nations.[111]

Coordination copies of an ATIC Study were received from the contractor, Battelle Memorial Institute, on 1 October 1954. They were returned for extensive revision by ATIC and resubmitted by Project Stork on 15 November 1954. A copy of the study was forwarded to WADC for review and comment in December. The study has not been published due to a desire to have it reviewed by outstanding scientific personalities in this field. ~~(CONFIDENTIAL)~~ (U)

In addition to activity by Project Stork, a purchase request was initiated 22 December 1954 to secure the services of Dr. Eugene Ryshkewitch of Kearfott Company, Inc., Clifton, New Jersey, to prepare

110. Project 30083: This number was originally assigned to a rubber and plastics project which was not given final approval. See History ATIC, 1 Jan 54 - 30 Jun 54, Page 103.

111. Project 30084: History of ATIC, 1 Jan 54 - 30 Jun 54, Page 105.

reports or studies reflecting his findings from review of such information as may be furnished him by ATIC on a call-letter basis. (CONFIDENTIAL)

(Uncl) Evaluation of Foreign Aircraft Armament.[112] This new project was initiated 4 August 1954 to monitor the activities of Armour Research Foundation under a $1.00 per year call contract. The purchase request was initiated 12 May 1954 to provide for conferences with, and reports from, the contractor. A revision to the purchase request was submitted 7 October 1954, specifying that such reports as would be required of Armour would be informal in nature. (~~CONFIDENTIAL~~) (U)

(U) (~~CONFIDENTIAL~~) Estimate of the USSR Heavy Press Capability in Air Weapon Development.[113] This new project was established 28 December 1954. Purpose of the project is to survey basic information to determine the status of the USSR in the utilization of heavy presses in the fabrication of air weapons components. It is contemplated that overt scientific data in fields associated with heavy press research will provide significant indications. These indications plus pertinent intelligence information will form a basis for an estimate. (~~CONFIDENTIAL~~) (U)

(Uncl) The Status of Research and Development in Dielectrics in the USSR.[114] This project is designed to determine the status of Soviet research and development in dielectrics and their applications. A survey study was completed in August 1954, and made ready for print-

112. Project 30086.

113. Project 30088.

114. Project Stork (9974): Page 64 Supra.

ing and distribution. The Soviet research and development data concerning dielectrics were gathered, separated and grouped according to facility; evaluated, summarized and compared with dielectric accomplishments elsewhere, particularly in the United States. The Soviets have, for many years, maintained a good dielectric research and development program together with satisfactory coordination with industry. It is clear that the Soviets have a good knowledge of dielectric work in the United States, and that their dielectric capability may be as good as that of the United States in certain fields. (~~CONFIDENTIAL~~) (U)

(Unc) Initial Report on the Capability of the USSR in Astronomy and Astrophysics:[115]

The purpose of this project is to prepare a report describing the initial results of a study, whose ultimate objective is the determination of the capability of the USSR in those phases of astronomy which might contribute to progress in the operation or development of air weapons systems. (~~CONFIDENTIAL~~) (U)

In a study which was completed 30 November 1954, the immediate objective was to present a collation of the information assembled on Soviet astronomy, to describe the present status of Soviet astronomy based upon a preliminary interpretation of these data, and to delineate those phases of Soviet astronomy which, because of their

115. Project Stork (9974): Page 64 supra.

probable relation to air operations, necessitate further detailed study and evaluation.

It was found that:

The over-all volume of Soviet effort in astronomy is at least comparable and probably exceeds that of the United States.

Soviet astronomers have as much potential for practical military research as their American counterparts.

No evidence was obtained suggesting that political influence has warped or impeded the progress of Soviet astronomy, so far as its presently conceived military applications are concerned.

Training in the USSR in astronomy and associated sciences is at a very high level. It is believed to be higher in quality than in the United States. Also, in the USSR, the degree of standardization between schools is greater than in the United States.

Soviet astronomical literature seems to be more classical and less specialized than that in the United States.

Soviet instrumentation in astronomy is not so fully developed as astronomical instrumentation in the United States.

Soviet astronomers are much more cognizant of American astronomical developments than are most American astronomers of Soviet developments.

Fields of Soviet astronomy which are believed to contribute most to Soviet capabilities to wage aerial warfare, and which require priority in a program for further detailed analysis and evaluation are; celestial mechanics, positional astronomy, meteorics, solar physics as related

to solar-terrestrial phenomena, and astronomical contributions to geodesy and gravimetry. (CONFIDENTIAL) (U)

(U) (CONFIDENTIAL) Foreign Biological and Chemical Warfare Activities:[116]

This is a new project to utilize the TIPS[117] program at Project Stork for integration of Biological and Chemical Warfare intelligence receipts into those files on a continuing basis. Letter reports are submitted every six months by Project Stork. The second report, dated 27 July 1954, showed that a total of 969 cards were added to the file in the preceeding six months, and that the B/W and C/W files showed a pronounced void of information in regard to weapons. (SECRET) (U)

During the six-month period ending 31 December 1954, a total of 419 items, including documents from ATIC and published literature were processed through the TIPS program. A small amount of information was gained in regard to weapons, but not a sufficient amount to warrant a separate study. During this period, available information on a given list of men and institutes was reproduced by Project Stork and forwarded to ATIC for subsequent delivery to D/I, USAF. (SECRET) (U)

(U) (CONFIDENTIAL) Status of Soviet Vacuum Tube Metallurgy and Methods of Manufacture:[118]

This work program, initiated in 1952, has been carried out under contract by Project Stork and covered a comprehensive study of the

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116. Project Stork (9974): Page 64, supra.

117. Technical Intelligence Processing System.

118. Project Stork (9974): Page 64, supra

subject by Mr. T. H. Briggs, Consultant to Stork. The reports, produced as a result of this study, were submitted separately as Phase I (Metallurgy) and Phase II (Methods of Manufacture). The Phase I report was utilized by ATIC in the publication of ATIC Report TR-AE-20, entitled, (Uncl) "Status of Soviet Vacuum Tube Metallurgy" on 28 August 1953. (~~CONFIDENTIAL~~) (U)

Phase II activity culminated on 30 November 1954 with the receipt at ATIC of two Project Stork reports: SR No. 69, (Uncl) "Soviet and East German Electron Tube Non-metallic Materials" and SR No. 70, (Uncl) "Soviet and East German receiving Tube Manufacturing Technology". SR No. 69 has been utilized in preparing an ATIC Report TR-AE-66, which was in the coordination stage at the close of the period. SR No. 70 required numerous changes to conform to ATIC requirements and was returned to the contractor on 28 December 1954 for revision. (~~CONFIDENTIAL~~)(U)

(U)(~~CONFIDENTIAL~~) Compilation of Foreign Aviation Medicine, Aircrew Equipment, and Meteorological Data.[119] This is a continuous-type project requiring the contractor, Battelle Memorial Institute, to process intelligence documents, and integrate into the TIPS files information on scientific and technical literature from the USSR and Satellite nations in the field of aviation medicine, aircrew equipment, and meteorological equipment and techniques. A status report from the contractor dated 28 October 1954 indicated an insufficient amount of information in the TIPS files to warrant a more complete study under any of the three fields. (~~SECRET~~) (U)

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119. Project Stork (9974): Page 64 , supra.

(Uncl) MISCELLANEOUS:

(Uncl) Blue Book[120] (Unidentified Flying Objects:)

A total of 217 unidentified flying object reports were received for the period 1 July to 31 December 1954. This is very near to the average received for like periods. One hundred and eight-one or 83% of the reports, during this period were classified as known objects or phenomena, 19 or 9% contained insufficient data for evaluation and 17 or 8% remain as unknown. (Uncl)

During 1954 there was a marked increase in the number of foreign sightings, particularly the reports of a cigar-shaped object. It was first reported in Italy and reports of sightings soon spread to France, Sweden, Germany, Greece and other European countries. This increase in foreign sightings have been attributed chiefly to publication of Major Don Keyhoe's books on Flying Saucers, which were translated and served to stimulate sighting reports. (Uncl)

Following the establishment of this project in 1947, the reported sightings remained on a fairly even level until 1952 when there was a tremendous increase. The reported sightings that year reached a peak figure of 1700. It appears that the increase was directly related to press treatment of "Flying Saucers". Prior to 1952, press coverage had been mediocre, but when sightings were reported over Washington D. C., along with other significant sightings, there was nation-wide press coverage, followed by an exceptional increase in reports. (Uncl)

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120. Project 10073. History of ATIC, 1 Jan 54 - 30 Jun 54, page 82.

A coordination conference was held between project Blue Book personnel and personnel of Hq 4602d AISS in Colorado Springs, Colorado during the week of 15 - 22 November. As a result of this conference, the UFO program as specified in AFR 200-2, "Unidentified Flying Objects Reporting (Short Title: UFOB)", dated 12 Aug 54, was placed into full operation and has been functioning since that time. A notable increase in timely and accurate reporting has already been experienced. (Uncl)

(Uncl) Foreign Physical Science Related to Air Operations:[121]

This is a new project established to determine the air technical intelligence possibilities associated with the activities of foreign countries in the field of atmospheric geophysics, and certain phases of astronomy. (Uncl)

From 15 September to 24 October 1954, the Project Monitor, Dr. H. A. Miley, toured Europe, visiting Rome, Frankfurt, Wiesbaden, Cambridge, London, Brussels, and Paris, to examine European science at close range and to attend the Tenth Assembly of the International Union of Geodesy and Geophysics at Rome. This assembly was following by a meeting of the Commission of this Union for planning the International Geophysical Year. (Uncl)

He learned that European science is developing rapidly, is very basic in nature, and its applied impacts on future air operations will be significant. (Uncl)

A report was prepared by Dr. Miley for the Commander, ATIC, pointing up Air Force interest in the activities of the International Union

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121. Project 20092.

of Geodesy and Geophysics, and the intelligence possibilities associated with international activities in the fields of atmospheric science and solar astronomy. (Uncl)

ATI Study 102-EL-53/4-34, (Uncl) "The Status of Selected Fields in Geophysics in Foreign Countries", was distributed 5 August 1954. It was prepared under Project Stork (9974) from a report submitted by the contractor, Battelle Memorial Institute. (Uncl)

(Uncl) Photographic Reconnaissance from Extreme Altitudes.[122] This project was initiated and approved in November 1954. Formal plans for accomplishing the project were being prepared at the close of the year. (Uncl)

Miscellaneous products not listed under other subjects included:

Report of preliminary examination, FE-5242-AE, (Uncl) "Tube Tester (Kennlinienschreiber) RPG-2", distributed 30 July 1954.[123] (Uncl)

ATI report, TR-AE-55, (~~CONFIDENTIAL~~) (U) "USAF/RAF Technical Intelligence Conference Report on Soviet and Satellite Aircraft Armament", distributed 31 August 1954.[124] (~~CONFIDENTIAL~~) (U)

(Uncl) Stalin Prize Awards.[125] Other than maintenance of information, previously collected on this subject, in the ATIC intelligence reference files, there was no action on this project. (Uncl)

122. Project 10205, approved 26 Nov 54.

123. Project 9975, "Processing of Foreign Equipment".

124. Project 9993, "D/I, Hq USAF Requests".

125. Project 10164.

(Uncl) HANDBOOKS:

In addition to the handbooks mentioned under Methods of Analysis,[126] various handbook projects progressed as follows:

(Uncl) "Characteristics and Performance Handbook, USSR Aircraft".[127] Introductory pages and indexes were revised. Handbook sheets for Type-37 and Type-39 aircraft were completed. Material was not released because of policy that pertinent studies will be published prior to handbook sheets. (Uncl)

(Uncl) "Handbook on Foreign Aircraft, Other Than Soviet".[128] It was proposed during the period to issue one handbook on all friendly nations' aircraft instead of the present ones on each nation on geographic location. Pending decision on this proposal, preliminary plans were made for accomplishing this consolidated handbook. (Uncl)

(Uncl) "Handbook on Foreign Engines of Friendly Nations".[129] The section on French engines was completed and sent for publication. Distribution will be made early in 1955. The remaining sections on other nations were well underway by the end of the period. (Uncl)

(Uncl) "Handbook on Foreign Guided Missiles".[130] Work was started on this handbook which is a new one established during this period. By the end of the period, nothing had been published or distributed on this handbook. (Uncl)

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126. Page 79.

127. Project 10128, 26 Oct 51.

128. Projects 10150, 9 May 52 and 10169, 15 May 53.

129. Project 10151, 2 Dec 53.

130. Project 10192, 20 Aug 54.

(Uncl) Revision of Characteristics and Performance Handbook on Foreign Aircraft Armament.[131] While work on this project was not completed in accordance with the original plan, much was accomplished on the revision of various chapters of Section I (USSR), and Section II (Satellites). The "Gun" and "Ammunition" chapters were distributed in October 1954. The "Fuzes" and "Bomb" chapters were sent to Hq USAF for printing. The "Computers and Optical Sights" chapter was in the coordination stage at the close of the period. ~~(CONFIDENTIAL)~~ (U)

(Uncl) Soviet and Satellite Radar Handbook.[132] Interim reports in this handbook were received from the contractor, Farnsworth Electronics Company, and changes and additions were made. Delivery of final report was set for about 1 February 1955. ~~(CONFIDENTIAL)~~ (U)

(Uncl) Soviet and Satellite Communication Handbook.[133] This handbook was completed by contractor and delivery was scheduled for about 1 April 1955. (Uncl)

(Uncl) Soviet and Satellite Electronic Navigation Handbook.[134] Completion of this handbook by the contractor was set for about 1 May 1955. (Uncl)

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131. Project 30073.

132. Project 20059.

133. Project 20060.

134. Project 20061.

Activities: Quantitatively, the figures below summarize project activity for the period 1 July 1954 through 31 December 1954.

	Approved	Completed	Active as of 12-31-54
Technical Analysis Div	2	0	17
Aircraft & Propulsion Br	5	9	44
Electronics Branch	4	5	40
Weapons & Industry Br	3	9	24

The following ATIC publications and other end products were issued in the cited technical fields during the reported period:

	ATIA	Aircraft & Propulsion	Electronics Br	Weapons & Industry
ATIC Studies		2	5	5
Technical Reports		8	7	14
Preliminary Reports on Foreign Equipment		0	2	0
Air Intelligence Digest Articles		5	2	22
Technical Briefs		231	163	232
AF 112's		7	0	4
Special Reports	2	1	0	0

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