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NRO REVIEW COMPLETED

NSA review(s) completed.

2 September 1964

MEMORANDUM FOR: Executive Director-Comptroller

SUBJECT: Annual Report for the President's Foreign Intelligence Advisory Board

1. I forward herewith the DD/S&T contribution to the annual report to the PFIAB for FY 1964. To facilitate use of this material with similar material from other Directorates, my statements are keyed to your memorandum, A-395, dated 24 June 1964.

2. I attempted to denote by separate paragraphs the appropriate NSCID's and DCID's. This was found to be impractical as it resulted in considerable repetition. Therefore, I have listed the authorities for various functions of the DD/S&T in Section J.

3. Should additional material be required or if you have questions regarding content, please contact [Redacted] on extension [Redacted]

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for **ALBERT D. WHEELON**
Deputy Director
for
Science and Technology

Attachment:
A/S

Distribution:

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- 4 - Dr. Wheelon wo/att
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A. Organizational Arrangements - The Directorate of Science and Technology, the successor to the Directorate of Research, was created in August 1963 to increase the resources for science and technology being applied to intelligence problems. Throughout FY 64, we gave heavy emphasis to the creation and early organization of the new structure. The present structure of the Directorate and missions and functions of the separate Offices are shown in Attachment A.

It will be noted that a Special Projects Staff has been established as a line component of the Directorate. It has been assigned responsibility for CIA participation in national level satellite reconnaissance undertakings. Currently, it is involved in developmental work on

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Attachment B shows the organizational units against the functional elements of the intelligence processes of "requirements-through-estimates." It will be apparent that functions have been assigned in such a way that the classic intelligence processes can be handled from requirements through equipment development and collection phases, on to data reduction and analysis, and finally to the production of an intelligence report within this single Directorate.

The integration of DD/S&T within the established structure of CIA has been accomplished satisfactorily, and

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efficient internal coordination procedures are in existence. The responsibilities of the Directorate also involve extensive coordination throughout the intelligence structure of the Department of Defense. While much progress has been made, the greatest problem in this area continues to be found in the field of overhead reconnaissance.

Throughout the following text I have listed, in accord with your format, some concrete results which are benefitting to the national intelligence efforts--my reports of 23 December, 23 June, and 18 August, will amplify these statements in some cases.

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C. Training of Intelligence Personnel - FY 1964 saw

an increase in the capabilities of our scientific analysts through advanced technical training. [redacted] analysts

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were given training in telemetry readout in courses at

[redacted] contractors, colleges, or in [redacted]

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Because of a relatively large number of overseas personnel

dealing with [redacted] the cross-training program for [redacted]

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operators/analysts/technicians at [redacted]

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was expanded. Agency personnel and two members of the

[redacted], and three members of the

[redacted] are given special training in

advanced radar techniques; Agency [redacted] personnel conducted

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analysis training in [redacted]

[redacted] U-2 and OXCART pilots are in training at

operational bases in the United States, [redacted]

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[redacted] U-2 pilots are in training at [redacted],

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[redacted] This training, which is monitored by Agency staff psychologists and utilizes personnel from Counter Intelligence, Security, Medical Intelligence, and other Agency components, includes escape evasion tactics, survival training, resistance to interrogation, as well as standard USAF-type familiarization and check-out flights in the U-2, and high-altitude reconnaissance practice

sorties. Training of [redacted] in the

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operation of [redacted] in

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[redacted] is being conducted

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and training for [redacted] for operation [redacted]

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[redacted] will be conducted when this equipment is installed in U-2 aircraft.

Considerable training is being conducted to increase the in-house competency in computer skills and technology. FORTRAN training was conducted for [redacted] personnel during FY 64. Further training is mentioned sporadically throughout this report and summarized under a general discussion of computers in paragraph ____.

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D. Intelligence Collection Requirements - The intelligence collection requirements of the DD/S&T emerge from two distinct sources. First, there is a need for support to operational planning by OSA and [] For example in OSA, current and accurate information is needed on the air defense systems of the Sino-Soviet Bloc in order to decrease the risk to penetration/reconnaissance aircraft. Requirements are also generated in OSI, FMSAC, and [] during the analysis of data and the production of estimates and reports. The analyst is the first to become aware of gaps in raw data--these he translates into new requirements for the collectors.

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OSI/DD/S&T has been particularly active in FY 64 in detailing scientific and technical requirements for clandestine and overt collection sources and overhead reconnaissance. The Office now has over [] general or specific requirements outstanding with collectors in the field. They have worked closely with the Collection Guidance Staff of DD/I with a view towards better statements of requirements, more complete coordination, and effective methods of levying them via Agency or other USIB channels.

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those which are best satisfied through

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25X1 Agency channels. [] in consonance with DD/P, then tasks the most appropriate assets to collect the required data, these assets generally being [] Third Party technical units, or clandestine agents.

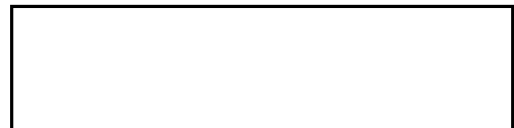
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25X1 FMSAC is generating an increasing number of requirements specifically directed to technical facets of missile and space fields; FMSAC works effectively through GMAIC, OSI, or [] in levying these on proper collectors.

25X1 The coordination and finalization of requirements for overhead reconnaissance systems, both manned aircraft and satellite, and for [] as well as photography, is conducted by the Committee on Overhead Reconnaissance (COMOR). This subcommittee of the USIB is the pre-eminent mechanism in the Community for stimulating and coordinating requirements, and functions with a good degree of satisfaction to its community-wide participants. The Office of Special Activities maintains liaison with COMOR in order to keep abreast of the present and future collection problems and to advise the committee members on operational factors.

25X1 A computer-driven information storage and retrieval system developed for COMOR by the Office of Computer Services makes a significant contribution to the optimum use of the overhead reconnaissance systems operated by OSA or other activities. This system quickly makes available

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detailed information on over 4,000 COMOR targets; it stores target identification data, historical data on collection requirements and past coverage, and past COMOR decisions. It thus provides a broad and accessible data base for the committee members when generating new requirements for USIB and/or ^{303 Committee} Special Group approval.

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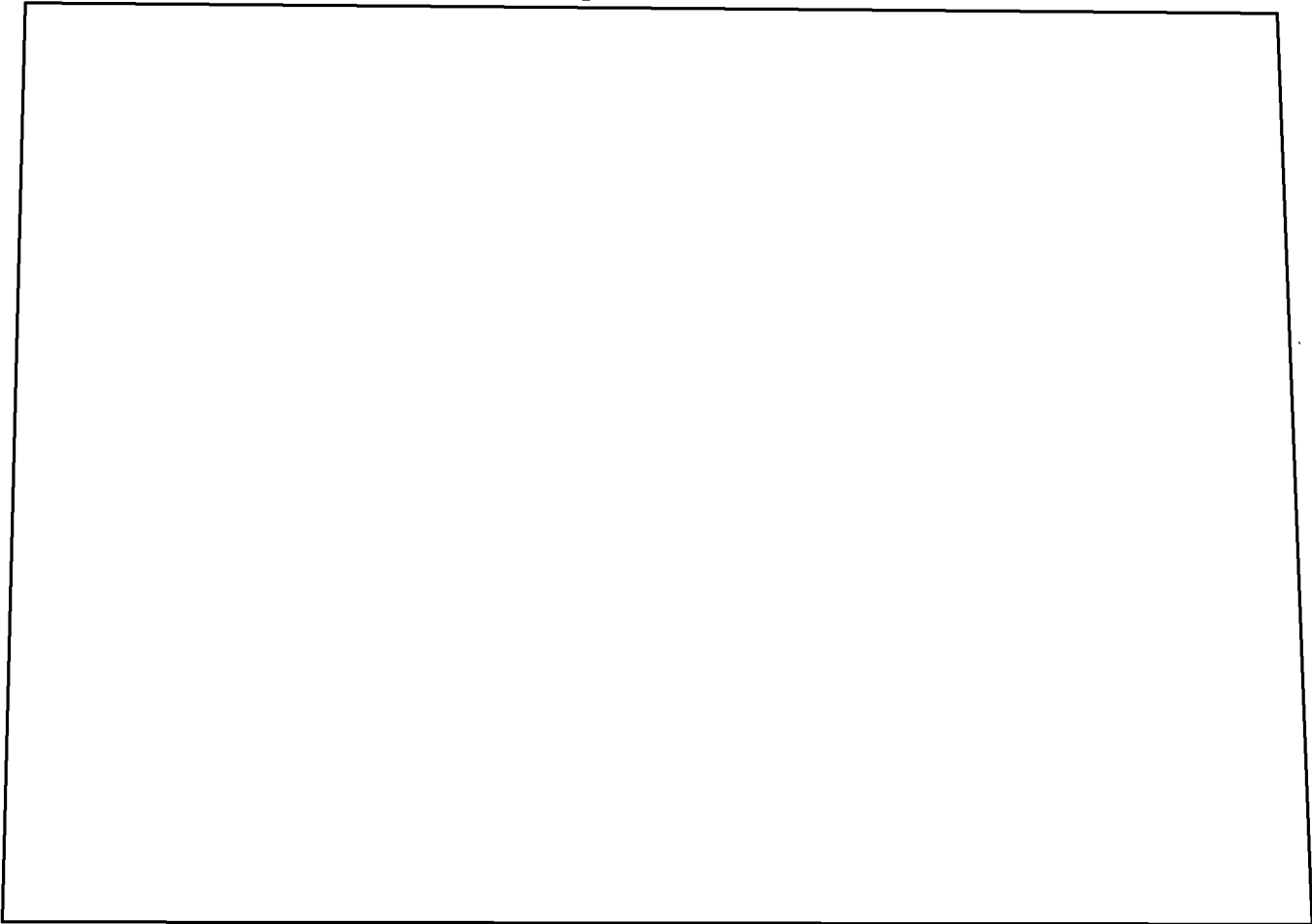
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E. 5-8. Intelligence Collection Activities - Collection activities are discussed herein under the general headings of New Techniques and Equipment, Operational Activities, and Significant Results during this reporting period.

New Techniques and Equipment - Particular importance has been given during this period to systems research and design of satellite collection systems, and the development of devices and techniques for collection against the ChiCom nuclear and missile programs. The Special Projects Staff of DD/S&T has studied and performed early development work on the following major projects:

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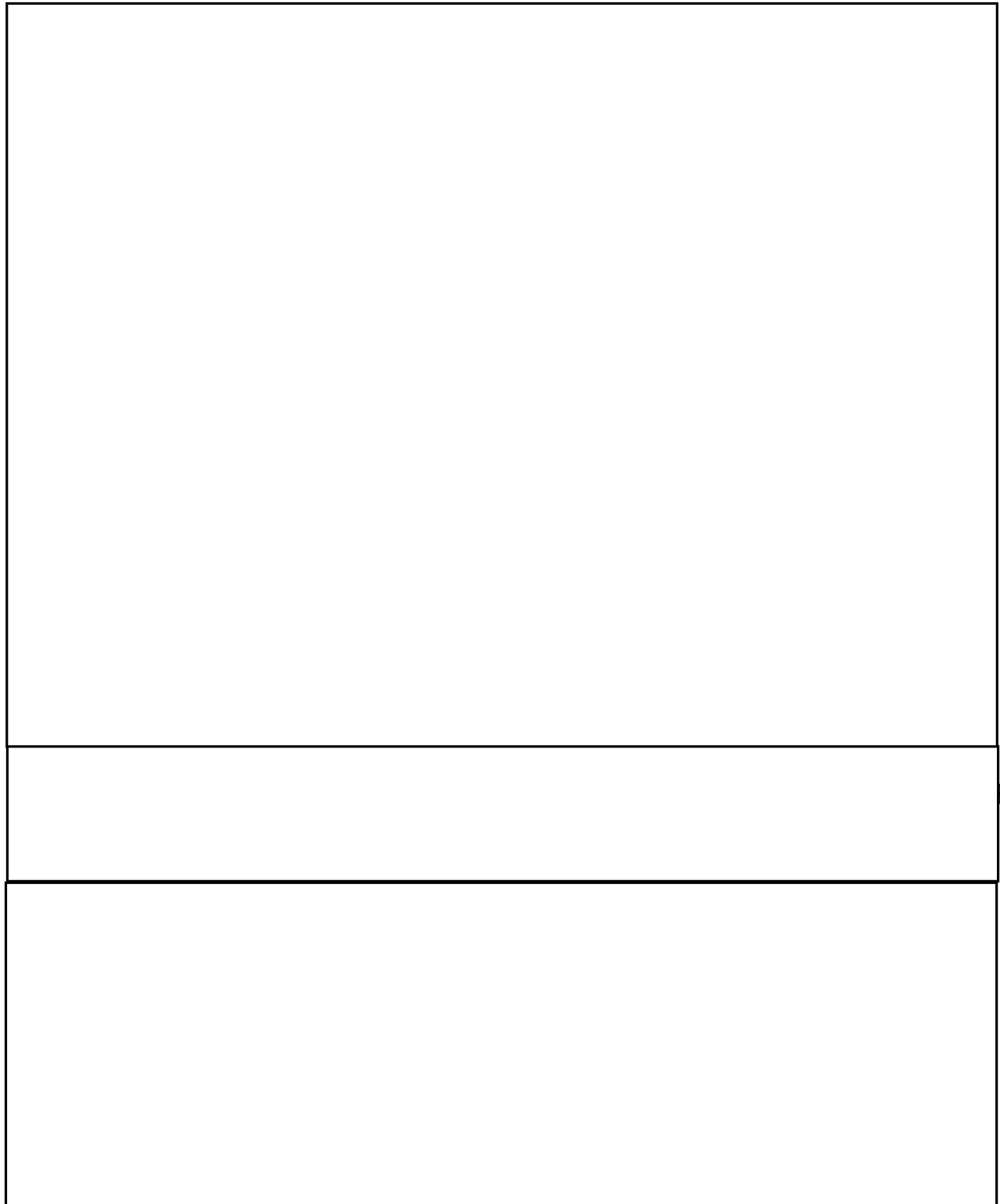
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[redacted] e

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[redacted] This project is in a stand-by mode ready for deployment when political conditions warrant. SAC has been assigned operational responsibility by the NRO.

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(4) Project [redacted] was an operation [redacted]

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[redacted] to determine the operational capabilities of the

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[redacted]

three-week period at staggered intervals. [redacted]

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[redacted]

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These programs have proved invaluable in supplying critical data in support of OXCART vulnerability studies.

The modifying of [redacted] for the [redacted] is currently being accomplished by a Task Force having membership from all Agency components having responsibility on this project. [redacted]

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[redacted] has been selected as the Systems and Subsystems Manager and numerous contractors are providing equipment for installation. [redacted]

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[redacted]

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While overhead reconnaissance systems have provided valuable data on probable locations of fissile material production plants and possible test areas, little is still known of the hard facts of the ChiCom programs. The following activities reflect the approaches which are being used to gain further data for detailed analysis and provide more confidence in our estimates:

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satisfy total requirements. However, when combined with information from observers, [] and photography, they will add to or discredit related information and improve our estimates or confidence factors.

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Operational Activities - The Office of Special Activities is the principal unit in the Agency concerned with operational aspects of photographic reconnaissance; aside from increasing its utilization of the subsonic U-2 aircraft systems in FY 64, it participated in the development of supersonic aircraft and space vehicles as collection platforms. Most of the work done by OSA falls under Program B of the National Reconnaissance Program on which the Board receives separate reports.

Project IDEALIST employed U-2 aircraft over denied areas to obtain high-resolution photography for technical intelligence usage. From two permanent operating bases in California [] personnel, aircraft, and equipment was staged to locations throughout the world to satisfy requirements of the intelligence community. Since early 1964 a special effort has been underway to refine a new capability which has allowed the U-2 to deploy, launch, and recover on Navy carriers. The IDEALIST program provided particularly valuable information from flights over Mainland China [] and over various areas of Southeast Asia. We are establishing bases [] to extend the possible coverage of U-2 missions. This combined with the new aircraft carrier capability will, as demonstrated by

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operation [redacted] provide
essentially a world-wide capability with the IDEALIST
System.*

* For details on [redacted] see DD/S&T Report
PR/SC/64-4 dated 10 June 1964; Subject: U-2
Reconnaissance [redacted]

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[Redacted]

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IDEALIST, and OXCART aircraft. Among those developments which are being accomplished, two represent potential advances in the state-of-the-art and realization of these developments continues to appear promising. [Redacted] is a concept using

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[Redacted]

section. Substantial progress has been achieved in solving formidable technical problems and experimental airborne equipment is now available to verify the concept.. [Redacted]

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[Redacted] is in development stages which will provide protection to the OXCART vehicle in all but the most dense Soviet defensive environments. While these developments are for protection of reconnaissance aircraft, their application to tactical employment is implicit.

A system which is being studied but has not progressed beyond the feasibility point is [Redacted] which

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Significant Results - Analysis of data from all

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has determined that the Soviet Union continues to provide strong support to a wide range of S&T activities, with no indication of a cutback in key areas because of current budgetary problems. We see continued large-scale Soviet programs covering almost all areas of military and industrial technology. Some areas of basic research, e.g., high-energy physics and radio astronomy, have been curtailed, however, and could ultimately impair Soviet capabilities. Nevertheless, our analysis points to an all-out effort to counter the Western offensive superiority by creating a significant strategic and tactical offensive capability and to build up the industrial and technical base to support future expansion. In addition, our increased efforts in the last year directed toward non-Bloc areas, particularly in the AE and missiles fields, have contributed to recent National Estimates on the advanced weapons capabilities of [] the UAR, France, Cuba, and Indonesia. The following highlights some of our

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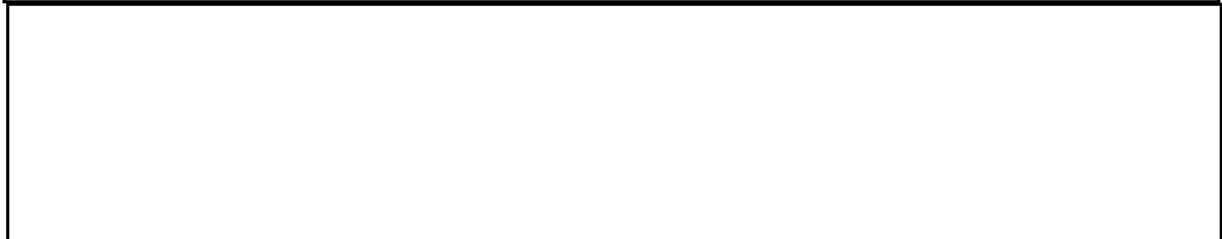
in-depth analysis. While major portions of this analysis have been done in OSI, many other components in the community have had a part.



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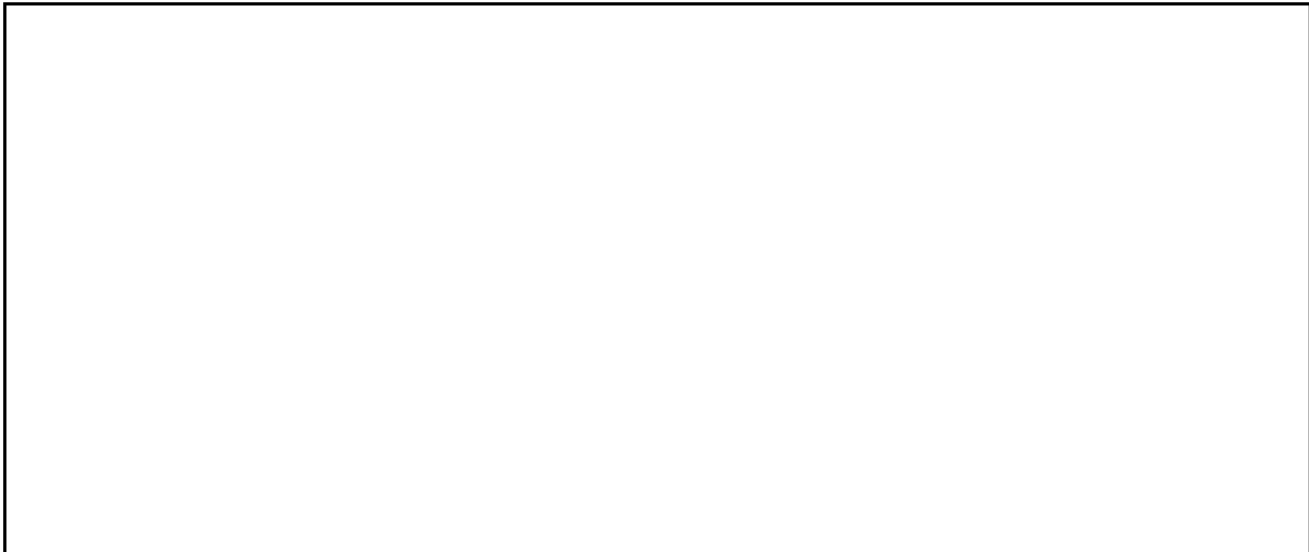


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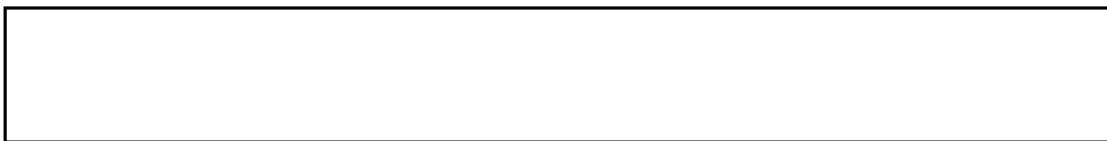
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Atomic Energy - In the last year good quality photography of plutonium production sites provided a basis for sharply decreasing the range of uncertainty in our estimate of future cumulative Soviet plutonium-equivalent production. A substantial analytical effort provided much improved identification of many of the specific nuclear warheads currently stockpiled for use with Soviet missile systems. Similarly, a better understanding of Soviet weapon technology and of weapon development practices and lead times was obtained.

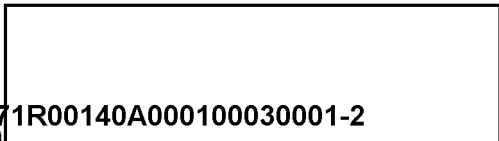
Considerable progress was made in our study of non-Soviet atomic energy programs. An inspection of the

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rather than weapon objectives. A major collection effort has substantially improved our knowledge of the French atomic energy program and of French nuclear testing plans.

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cut back fissionable materials production. The non-Soviet nuclear and potential nuclear powers will be carefully watched. We expect during the next year to clear up many of the present uncertainties regarding the Chinese atomic energy program.

Missiles and Space - Soviet ICBM development and testing remained at a high level during the past year and several significant achievements have been detected. Flight testing began of two new ICBM's, designated the SS-9 and SS-10. The SS-9 is related in many ways to the highly reliable and extensively deployed SS-7, but is larger and may be more accurate. The SS-10 is still too early in its flight test program to permit a determination of its characteristics.

We have no direct evidence of the imminent emergence of a large Saturn-type flight booster for 100 MT delivery or space application. However, the Soviets have static thrust stands capable of handling these sizes, and this, coupled with the construction of large launch complexes at Tyuratam, leads us to anticipate the development of such a system in the near term. In view of the lack of evidence of high-energy propellants, these systems will probably incorporate the propellants now utilized in the SS-9 and 10

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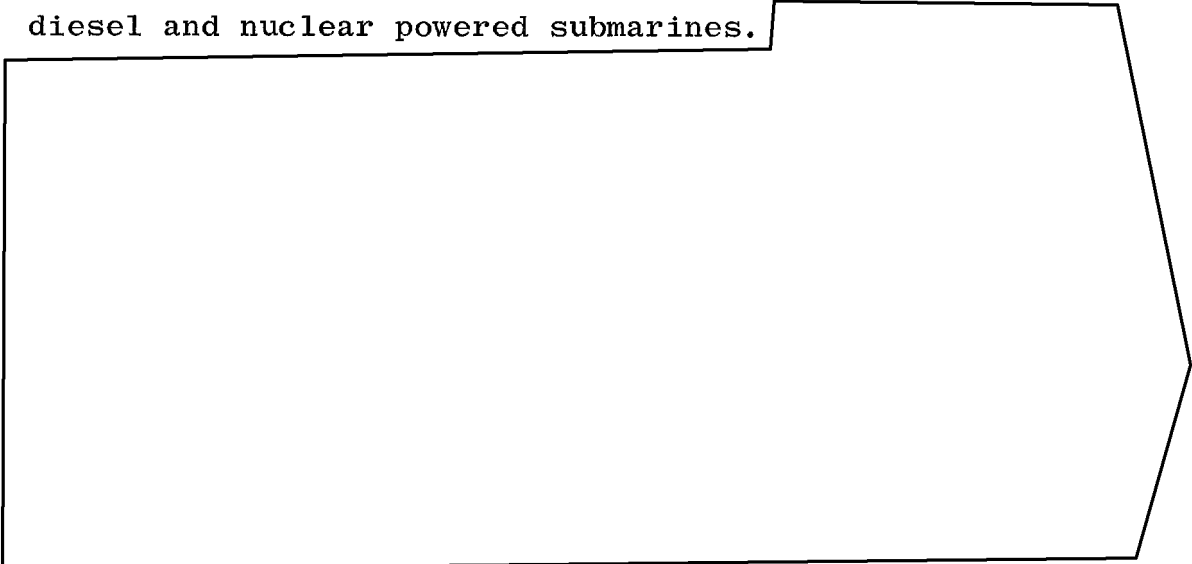


Recent single silo


designs are probably development efforts to decrease weapons systems vulnerability, but the system(s) for which they are intended cannot be determined at this time.

Hard information now exists confirming our earlier findings on the over-all configuration of the SS-N-4 350-n.m., surface-launched, ballistic missile for both diesel and nuclear powered submarines.

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deeper operational capability  than was earlier estimated by the community.

Excellent coverage of the Tyuratam rangehead through the summer of 1964 continues to indicate that the pace of construction at the rangehead is very high and still

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increasing. The new construction is intended to support current and future diversification in both the Soviet ICBM and space programs.

We believe that the Soviets are engaged in a deliberately planned and paced manned lunar program not competitive with the announced U.S. program. We believe the Polyot series may be a first attempt toward R&D rendezvous testing and that the first significant step may be the establishment of a space station after a series of multimanned flights of extended orbit duration (10-14 days).

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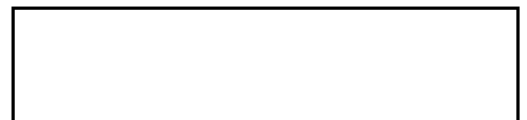


strategic interest to the USSR and may be conducting other types of military support reconnaissance.

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The Chinese Communists' ballistic missile program continues at a slow pace and we have no evidence of their intentions, although we suspect they may be involved in a native program to develop an MRBM for nuclear weapon delivery. This is supported by the existence of a test range and a number of static test stands capable of handling both liquid and solid propellants suitable for this purpose.

Air and Missile Defense - Our principal contributions in the past year to the analysis of Soviet air defense capabilities have been a re-analysis of the Soviet missile

25X1D and a computer simulation of the SAM system. Our analysis now shows that the Soviets were probably launching antimissile missiles (AMMs) against target missiles as early as 1960. Analysis conclusively shows that the Soviets have not launched AMMs against ICBMs, but the community now agrees with the OSI analysis that the Soviet ABM system could intercept ICBMs and IRBMs with almost equal effectiveness.

Analysis of Soviet air defense missiles, such as the GRIFFON, and air defense complexes, such as those around Leningrad, are receiving concentrated study. OSI analysis clearly shows GRIFFON to be a very good air defense missile. Our future efforts will focus on determining the true role

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of the Leningrad complexes, the Hen House radars now being deployed, and the major electronic facilities being constructed around Moscow.

FMSAC continues to build toward its objective as the central government source for reporting on foreign missile and space events. From its present personnel strength of we anticipate FMSAC will grow to about during this fiscal year. The Activities Interpretation Division, which is the current intelligence analysis unit and operates the FMSAC Control Room on a 24-hour basis, is close to full strength. The Signal, Trajectory, and Optical Data Analyses Divisions have a nucleus of highly skilled engineering personnel and the principal staffing now in progress in FMSAC is in these areas. FMSAC has external research contracts in the signal and trajectory analysis fields to fulfill significant requirements here until staffing is complete. Most of the intelligence material being analyzed and produced by FMSAC is being

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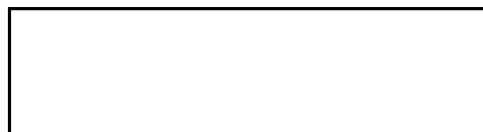
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put into a digital computer in order to provide automatic storage and retrieval of this information. //

The Control Room of FMSAC now receives all-source information and publishes daily summaries of missile and space activities and more comprehensive reports which "wrap up" all known data on each important event. //

The Office of Scientific Intelligence participated in a community-wide, comprehensive review of present and anticipated capabilities to detect foreign nuclear tests and the preparation to the report to USIB related to Safeguard D of the Nuclear Test Ban Treaty. In addition, they provided support in the field of atomic energy intelligence to the AEC for the United States/USSR meeting on nuclear desalination. OSI routinely provided support to GMAIC at the many working groups on missile systems and space vehicles, and engaged in a survey and evaluation of intelligence community requirements for information on the Soviet space program involving a survey of space-related contributions from all collection assets. The degree of community and industry cooperation in collection and analytical activities for the high-priority fields of nuclear energy and missiles and space has been at a very satisfying level during FY 64.

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The OXCART program, concerned with development and maintenance of an operational capability utilizes the Lockheed A-12 aircraft, and will allow covert supersonic aerial reconnaissance missions over denied areas to obtain high-resolution photographic data similar to that now obtained with the subsonic U-2's. Although a number of flights were made at the designed speed of Mach 3.2 during FY 64, technical problems have prevented the attainment of a full operational capability. We anticipate early resolution of these problems to achieve the design capability.

Aside from satellites and the large sophisticated U-2 and OXCART systems as photo collection platforms, the Agency is working on component development such as a

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R&D programs are pointed toward and

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for the utilization of photopolymerization principles in the development of essentially grainless high-resolution film, and for an electronographic image intensifier to permit direct imaging of electrons onto film.

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[Redacted] Updating of equipment

to maintain and increase this capability continued during

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the year and plans have been made to supplement [Redacted]

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coverage by establishing [Redacted]

On the basis of the surveys and assessments which have been

made by FMSAC, OSI, and [Redacted] the potential of the second

site is considered to be extremely high. FMSAC has a very

close working relationship with [Redacted] concerning the operation

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of [Redacted] and is in constant touch regarding target

assignments and priorities and provides technical evaluations

of information.

[Redacted]

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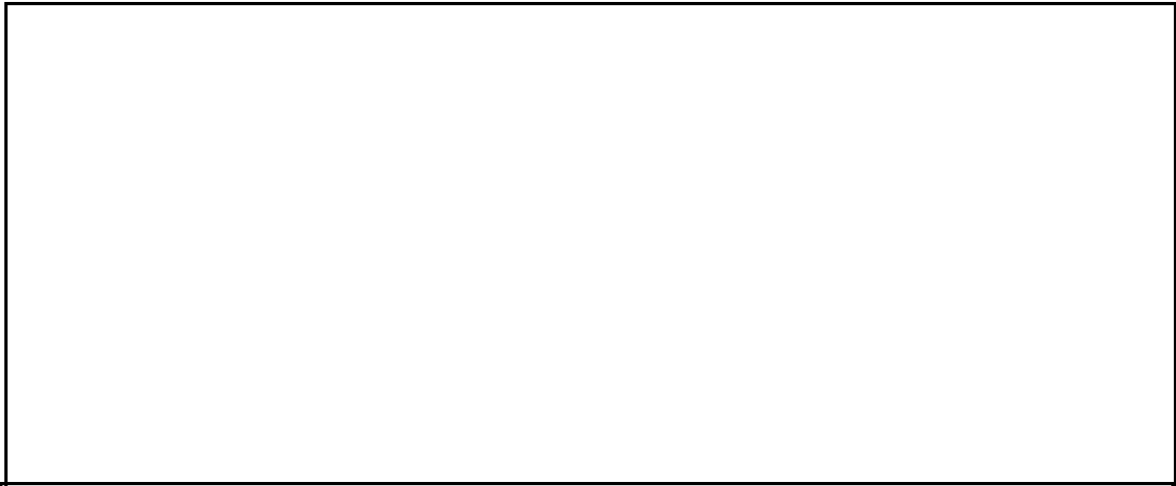
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E-10. No contribution.

E-11. Order of Battle - While not a primary mission of the DD/S&T, this Directorate finds itself acquiring information and performing services which are extremely beneficial to those with responsibilities for order of battle. The Office of Computer Services has initiated an effort to integrate into one system machine language files generated by CIA and other intelligence agencies on world-wide collection targets with emphasis on foreign defensive order of battle information. System is now supporting collection and analysis activities of OSA, OSI, ORR, OCS, and DD/P (SOD).

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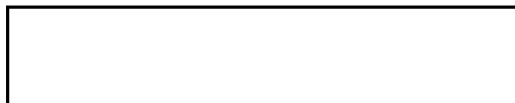
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To support Agency or other collection efforts, DSD/SI has established and maintains a detailed order of battle on air defense capabilities of the Sino-Soviet Bloc and other countries which have Soviet equipment. Some of this information is computerized so that fast "readouts" on specific areas can be made.

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F. Screening Raw Intelligence - DD/S&T offices routinely screen SIGINT, agent reports, ELINT information, photography, and all other forms of raw intelligence in order to exploit its substance and provide a feedback to improve the quantity and quality of collections. The management of the assets within DD/S&T as a single unit provides a convenient way for preventing overlap or duplication in this information handling and reporting. For example, the OSI reports on the systems aspects of Soviet missiles and space programs, whereas FMSAC is limited to the analysis of

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[Redacted]

this is in contrast to

the long-range studies in depth which are performed within OSI or by its contractors, such as

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The volumes of data which can be screened by an individual analyst or an office is dependent upon the background knowledge against which the information is read, the speed of the analyst, and the amount of information similar to that being screened. The Office of Computer Services is developing computer systems and programs to process and store and retrieve intelligence information in various ways; it will be several years before this can be useful in first echelon screening of raw intelligence but it does hold considerable promise. This is discussed further under Project

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G-1. Intelligence Production Current Intelligence-

Because of the generally increased emphasis on current intelligence, the OSI has created a special staff to facilitate the meeting of priority demands for current intelligence reporting on scientific and technical problems of national interest. Steps have been taken to publish shorter, more concise, and more timely articles in the monthly SID, SIB,'s, and ad hoc memoranda. Publication of a new daily, the SURVEYOR, which contains brief current intelligence items and comments of immediate interest, has been initiated. In addition, the office has increased its contributions of S&T items to other Agency publications, particularly the CIB and Weekly Reports of the Office of Current Intelligence, DD/I. The Scientific Intelligence Digest for the first time is being disseminated to selected members of the President's Scientific Advisory Board and to certain OSI consultants.

FMSAC produces a Daily Missile and Space Summary, which is a

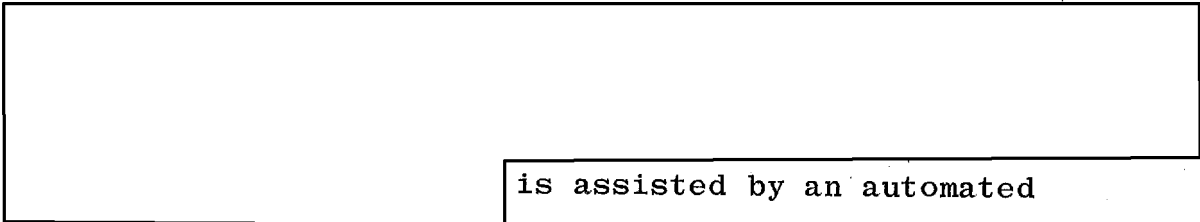
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[REDACTED] In this area, FMSAC maintains extremely close relations with the Military Division of the Office of Current Intelligence and is therefore able to provide continuing and effective support to that office.

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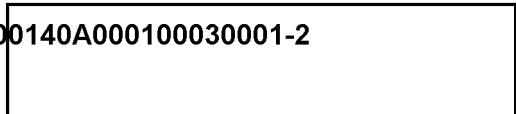
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is assisted by an automated information storage and retrieval system developed by the Office of Computer Services. Presently containing over 100 items of information on more than 1,000 past events, the system provides for rapid display of pertinent segments of historical data so organized as to facilitate analysis and evaluation. These files are believed to be the most complete and detailed machine language files in the Intelligence Community on Soviet missile test range activities.

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G-2. NIE's and SNIE's - The most significant outlet for the analysis and research undertaken by OSI is in the form of National Estimates; contributions were made to 20 such Estimates during FY 64 and about 20 per cent of the total effort of the OSI is devoted to this form of production. The Office makes its contributions directly or through three of the technical committees of USIB (GMAIC, JAEIC, and SIC). The Office provides active support to the Agency policy of establishing these committees as the focal point for the community coordination of scientific and technical intelligence. As in previous years, OSI made major contributions to the primary Soviet estimates (atomic energy, air and missile defense, space, chemical warfare, strategic attack, and general purpose forces), as well to estimates on France, UAR and [redacted], Cuba, [redacted], and India. The Office contributions to National Estimates are based on a foundation of intelligence analysis and research, internal and external, which is published as part of the scheduled office program or ad hoc studies.

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OSI provides the Chairman and Secretariat of the Scientific Intelligence Committee as well as Chairmen and Secretariats for the following: BW-CW Subcommittee; Electronics Subcommittee; Medical Intelligence Subcommittee; and the Priority Scientific and Technical Working Group. The Office has provided active support to these and other components of

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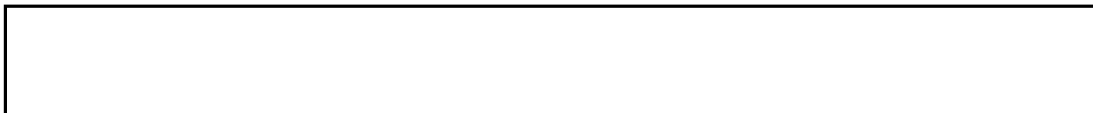
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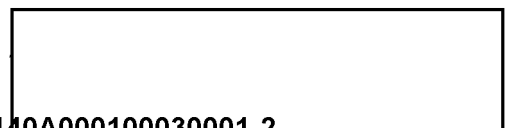
SIC and has contributed to several interdepartmental scientific intelligence studies and estimates covering a wide gamut of science and technology. Of particular significance is the committee's contribution to a national estimate assessing the Soviet biological warfare program. The committee's estimate is that there is no major offensive BW program in the Soviet Union, a reversal of the previous estimate. Currently, the SIC is nearing completion of a study on the potential capabilities of various nations to develop an offensive biological or chemical warfare program. Under the SIC a task force program for collection of critical area medical information for rapid use has been organized which marshals Agency collection services and is coordinated with USIB interests via the Medical Intelligence Subcommittee. Life Sciences Division/SI has become the

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OCS has in operation a system to compute, summarize, and display figures on Soviet military expenditures at several levels of detail; the system handles data covering up to thirty years at one time and contributes to the analysis of the effects of various Soviet force alternatives on the Soviet economy. The outputs of the system appear in the NIE and IAP.

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G-3. - National Intelligence Survey - The OSI has revamped its program of NIS participation during this reporting period to comply with the reoriented NIS program. Scientific sections of the NIS are now being done on a world wide basis rather than the formerly limited basis. OSI will now prepare contributions, on areas with a recognizable scientific capability, for the summary Section 7 which has replaced the lengthy scientific Chapter VII. In addition to its own contributions OSI also provides, through the SIC Secretariat, the coordination and editorial staff for the portions prepared by the DOD agencies.

OCS has under development Project EPIC (Electronic Printing of Intelligence Composition), a system which will link the computer and advanced photocomposing equipment to produce page makeup automatically in the printing function. The major printing task for Project EPIC is the NIS. EPIC will, of course, contribute to the mechanics of printing the NIS and not to the substance.

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In addition to analysis reports on significant [redacted]
[redacted] has begun publication of a [redacted] series
which describes methodology and results of its [redacted]
program.

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In March 1964 a Contractors and Consultants Seminar was held at Headquarters to review and discuss missile and space intelligence. Over 100 specialists in fields ranging from radiation belt research, biomedicine, spacecraft, missile facilities, and missile systems participated in the discussions. Papers which were presented are now being prepared for publication in a final report on the Seminar. We expect to continue this seminar as an annual event to stimulate and coordinate the analysis of technical information from all collection sources.

During the year the Office of Scientific Intelligence produced contributions to 20 NIE's, 20 NIS's and, as finished reports, 40 editions of the Scientific Intelligence Digest and 85 SIR's or SIM's. This latter production formed the base from which the NIE and NIS productions could be formulated.

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I. Research and Development - In view of the recency and completeness of my memoranda on research and development, there is little additional to report at this time. As stated in the final paragraph of my letter of 18 August, our progress in S&T areas under the present DD/S&T leadership showed good improvements during FY 64. We expect a continuing, orderly growth; however, in view of budgetary cutbacks for FY 65 and 66 our planned programs will be stretched out over a longer period of time.

An area of continuing research and development in both equipment and personnel is that of computer applications. Upon the formation of DD/S&T in August 1963, the Agency assets in computers were transferred from the support elements to the DD/S&T and upgraded to the position of an Office. OCS is now the Agency's central computer facility and services all four Directorates of the Agency under its mission to develop and coordinate automatic data processing activities.

A large-scale scientific computer (IBM 7090) was acquired and installed in the CIA Computer Center along with

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OCS computing activities cover a wide range of applications from intelligence information storage and retrieval systems through scientific or mathematical applications. Included in OCS's computing functions are problem analysis, EDP systems design, computer programming, and operation of computer and related equipment.

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(detailed system design) the CHIVE team has proceeded to develop detailed specifications on scope of input to the new system, indexing techniques, dictionaries and thesauri required, file organization within the system, and management considerations relating to costs, personnel, organizational structure, and the like. A major test to evaluate the CHIVE indexing concept (single point document indexing in an all-source environment) has been planned and will be carried out in October 1964. The test will involve a score of indexers and a corpus of 5,000 representative documents on Communist China.

Project ALP: Project ALP (Automatic Language Processor) is a system being developed jointly by CIA and [] assist the Agency in performing its large-volume translation responsibility (initially, Russian to English and stenograph symbolic language to English). Special purpose hardware, including a high-capacity, random access,

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[] and delivered to the Agency []

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While there is still much to be done in channelling
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science and technology into the CIA and developing it toward
intelligence needs, I feel that FY 64 has been a year of pro-
gress. In particular, the Agency has been organized and
postured to attract well-qualified scientists and engineers
into the organization and to seek out from among the Govern-
ment and industrial research laboratories the results of basic
research and advanced concepts which we can relate to the 25X1A

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J. Scientific and Technical - The organization of scientific and technical resources for intelligence was discussed at length in my letters of 23 December 1963, 23 June 1964, and 18 August 1964. The only changes therefrom have been slight ones reflecting reduced authorizations for personnel for assignment to FMSAC and ORD.

Figure ___ reflects the relationship between the USIB and its subcommittees and the Agency management arrangements for handling scientific and technical intelligence. Production of S&T intelligence by OSI, [] and FMSAC is channelled through the GMAIC, JAEIC, SIC, and [] committees and in most cases senior line officers of the Agency act as Chairmen of these subcommittees of USIB. This provides good substantive coordination to most facets of technical intelligence production and statements of requirements and in some, but not all, cases a strong influence over collection assets.

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In its collection, coordination, and intelligence production functions, the DD/S&T operates under the following arrangements with the members of the intelligence community.



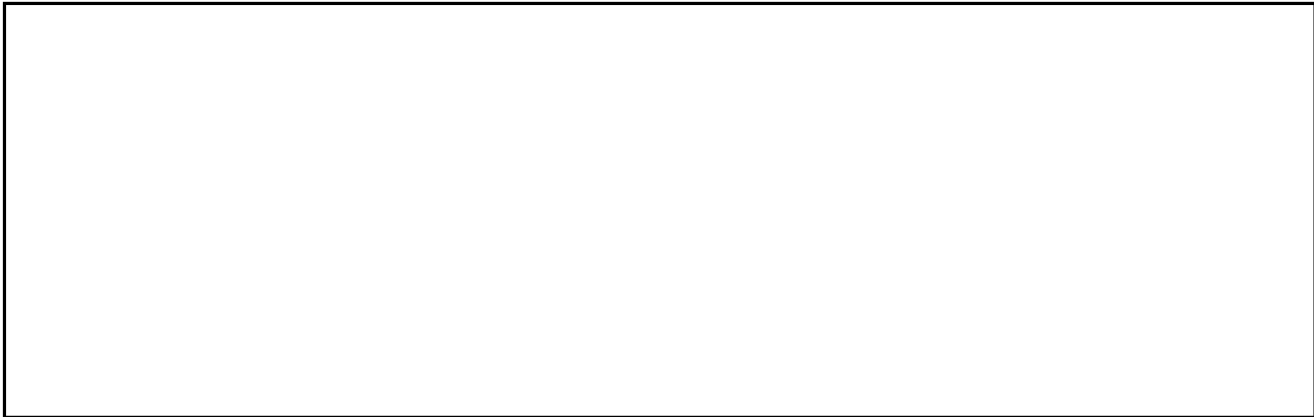
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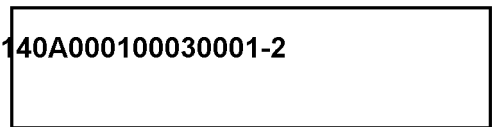
(2) The responsibility for the Agency's production of finished intelligence on all foreign scientific and technical activities rests with the Office of Scientific Intelligence, under the authority of NSCID 3, DCID 3/3 for atomic energy, DCID 3/4 for guided missiles and astronautics, and DCID 3/5 for other scientific and technical intelligence. The OSI program for the production of intelligence on scientific and technical matters is planned on the basis of Comprehensive National Objective in DCID 1/2 and PNIO's in DCID 1/3 and quarterly supplements thereto.

(3) The Office of Special Activities carries out its development and operational functions under appropriate current agreements between the Secretary of Defense and the Director of Central Intelligence. Presently applicable documents are those signed on 2 May 1962 which established the National Reconnaissance Office, and on 24 January and 13 March 1963 which delineate management and organizational detail.

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(4) The FMSAC was established through Headquarters Notice 1-39, an internal CIA document, and achieves coordination with the intelligence community through DCID 3/4--Production of Guided Missile and Astronautic Intelligence.

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