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OFFICE OF DEPUTY DIRECTOR (RESEARCH)

1. The Office of the Deputy Director (Research) was formed on 19 February 1962, for the purpose of bringing together and emphasizing certain existing areas of advanced technology as they apply to intelligence collection. Scientific support to the Clandestine Services, NPIC, and Communications were not included in the new mission.

2. The first unit assigned to the Deputy Director (Research) was a major portion of the Development Projects Division of the DD/P. This portion deals entirely with the Agency's overhead reconnaissance activities, both operational and developmental.

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[REDACTED] of the original DPD remained in DD/P. The present organization is known as the Office of Special Activities and is presently engaged in an expansion to meet the greatly increased workload. During this period, the National Reconnaissance Office was formed by joint agreement between the Director of Central Intelligence and the Secretary of Defense. Considerable effort has been expended in implementing in detail the concepts outlined in the NRO Agreement.

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The Assistant Director, Office of Special Activities, is also the Director of Program B of the National Reconnaissance Program. This program, whose FY 63 and FY 64 funding has recently been approved by the Director of Central Intelligence and the Secretary of Defense, consists of the following:

a. OXCART

This project has as its purpose the development and operational employment of a follow-on to the U-2. It is currently in the flight test phase, with the operational date now forecast for the summer of 1963. The air frame, engines, and sub-systems are proceeding satisfactorily and should meet their designed goal by that time. A major effort is now being applied to provide means of covert entry to denied areas. There is a major radar cross-section reduction program in effect which has been quite successful. In addition to reducing the cross-section of the vehicle, considerable emphasis is being placed on detecting and exploiting known weaknesses in the Soviet air defense system. It is hoped that by a combination of these two factors a truly covert penetration will be feasible. Secondary

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██████████ via ██████████
██████████ System

emphasis is being placed on providing sufficient electronic defensive measures for the vehicle to prevent its being destroyed should detection inadvertently occur. The operational plan envisages three or four air refuelings, depending on the specific target area, permitting complete operation from an interior U. S. base. Major emphasis is now being applied to all operational aspects in order to be ready at the earliest possible date.

b. IDEALIST

This project covers all of the Central Intelligence Agency's U-2 overflight activities. The recent Cuban and Taiwan Straits situations have resulted in increasing the number of missions from 28 in FY 1961 to 32 in FY 1962 and 15 in the first quarter of FY 1963. These flights have been highly successful in providing considerable quantities of first quality information in support of these situations. The major emphasis is now being placed on providing the U-2 with electronic defensive apparatus which will prolong its life in a SA-2 environment. If this vehicle can be protected from SA-2's and the MIG 21, it should have

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several more years of useful life over certain target areas.

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d. CORONA/ ██████████

The CORONA project has been highly successful over this period in providing high quality satellite reconnaissance photography. It remains the U. S. workhorse and has reached a reliability greater than 75%. Two recent situations causing severe film fogging have been satisfactorily

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solved, and this system is programmed to continue for at least the next calendar year at the rate of one per month. The resolution of the photography has been increasing steadily and is now considered very satisfactory for survey purposes.

e. ARGON

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The ARGON project for mapping photography is quite similar to  and has had one partially successful mission and another flight just completed. To provide satisfactory photography the orbits have been lowered and shielding added to reduce the radiation dose from high altitude nuclear tests to acceptable levels. This project is currently programmed to be completed after two more successful missions.

3. Office of ELINT

The consolidation of the Agency's ELINT program was one of the major objectives of the reorganization. This was accomplished by the formation of the Office of ELINT under the Deputy Director (Research). This office has been formed in

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concept, and a Table of Organization has been recently approved; appropriate transfers of personnel, funds, and space have not yet been effected.

The Office of ELINT is responsible for the following:

- a. Research, development, testing, and production of ELINT and COMINT collection apparatus for all Agency applications.
- b. Technical operation and maintenance of CIA deployed non-agent ELINT systems.
- c. Training and maintenance of agent ELINT equipment.
- d. Technical support to the Third Party Agreements.
- e. Data reduction of Agency-collected ELINT signals.
- f. ELINT support peculiar to the penetration problems associated with the Agency's reconnaissance program under NRO.
- g. Maintain a quick reaction capability for ELINT and COMINT equipment.

During this period a major portion of the effort was applied to identifying the various Agency SIGINT efforts suitable for transfer to the Office of ELINT. Support to existing ELINT

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projects has been continued by the various Agency components concerned pending transfer. Special emphasis is now being placed on supporting the aircraft reconnaissance program, namely, providing new and more detailed information on the Soviet early warning net, the SA-2 sites, and the MIG-21 capabilities. Activities of this nature will increase considerably over the next year.

4. Office of Research and Development

This office was formed to stimulate research and innovation leading to the exploitation of scientific non-agent intelligence collection methods. It will be responsible for the following main areas of interest:


- a. Special emphasis will be put on applied research leading to improved methods for accomplishing overhead reconnaissance photography. The use of color photography to obtain special types of information and the use of a high-power laser for night photography are two such examples.
- b. A broad program of basic and applied research

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in all areas which will lead to innovations in advanced technical collection methods. New techniques in the fields of acoustics, electromagnetic signal propagation, as well as special techniques on thin-film electronic systems, are some examples of this program. Emphasis will also be placed on those advances required to produce satisfactory high altitude radar photography.

c. All non-agent technical collection systems will be considered by this office and those appropriate for field deployment will be so deployed. The Agency's missile detection system, Project  based 25X1A2d1 on backscatter radar, is an example.

d. This office will also provide integrated systems analysis of all possible collection methods against important target systems. Analysis of collection methods against the Soviet antiballistic missile program is an example.

At present this office exists in concept only, although a tentative Table of Organization has been approved. No personnel, funds, or working space have been authorized. It is expected

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that at least a year or more will be required to bring this office up to working strength. Recruitment of qualified scientific personnel will be the chief bottleneck in attaining our goal.