TOP SECRET
Copy
SPECIAL HANDLING

DEPARTMENT OF THE AIR FORCE
WASHINGTON

Functions: NRO Prog C

OFFICE OF THE SECRETARY

13 July 1962

MEMORANDUM FOR DR. CHARYK

SUBJECT: Comments Regarding Secretary of Navy Korth Memorandum of 28 June Pertaining to POPPY Project Director

In nominating Rear Admiral V. L. Lowrance to serve as the POPPY Project Director within the Navy, Secretary Korth indicated his desire that Admiral Lowrance continue to utilize the Technical Operating Group (TOG).

The TOG has, in the past, been responsible for certain mission planning and orbital operation functions which are now to be accomplished within the NRO staff in Washington, D. C. The TOG additionally has been responsible for certain direct support activities for Project POPPY which would continue to be unique for that project.

In order that you may be better prepared to discuss this matter with Admiral Lowrance, the following is provided:

a. A Background Paper describing the Technical Operation Group (TOG) as now constituted and as now functioning.

b. A Talking Paper for use in discussions on the matter of incorporating the POPPY project into the NRO operations.

c. A recommended PROJECT CONCEPT pertaining to the conduct of the POPPY effort.

3 Atchs
1. TOG Background Paper
2. Talking Paper
3. PROJECT CONCEPT

JOHN L. MARTIN, JR.
Colonel, USAF
Director, Office of Space Systems

Not used in this form, but saved for future reference JLM

Copy 1 of 3 Copies
Page 1 of 1 Pages.
Control No.

TOP SECRET
Copy
SPECIAL HANDLING

~~TOP SECRET~~
SPECIAL HANDLING

TECHNICAL OPERATION GROUP (TOG) FOR POPPY

1. The TOG is organized to aid the POPPY Project Director in the execution of the POPPY Project.

2. The TOG is composed of five basic members as follows:

Mr. Howard Lorenzen, NRL
Mr. William Howe, STIC
Capt. Edward E. Kerr, ONI
Lt. Paul D. Fosko, NSG
Mr. Joseph M. Struve, NSA

Two additional members were recently designated to the group. These two members have not participated actively to date. They are:

Cdr William A. Hopkins, OP 07
Mr. Samuel Hubbard, BUWEPS

3. The primary area for each representative on the TOG is as follows:

ONI - (Office of Naval Intelligence) Intelligence requirements; current intelligence affecting the orbital tasking; final intelligence product from the project.

NRL - (Naval Research Laboratory) Design and fabrication of POPPY satellites and the ground interrogation huts; Technical specifications concerning how each element should be operated.

STIC - (Navy Technical Intelligence, located at Naval Observatory) Current collection requirements; frequency and periodicity of orbital interrogation; quick look data from product; adequacy of product.

NSG - (Naval Security Group) All actual collection activity; directs the peripheral stations with respect to the recording and return of material to the ZI; provides personnel.

NSA - (National Security Agency) Processing and production of intelligence data from the collected materials; preparation of mission reports.

Copy 1 of 3 Copies
Page 1 of 3 Pages.

Control No.

~~TOP SECRET~~
SPECIAL HANDLING

OP 07 - (Navy Development) Responsible for activities of NRL.

BUWEPS - (Bureau of Weapons) Concerned with budget and booster allocation matters.

4. Each member has been assigned TOG duties in addition to his normal duties by letter from his organization. The members can call upon assistants or special representatives from within their organization when particular problems are under discussion. Meetings are held as called by the chairman. In general, during periods involving detailed planning and detailed orbital operations, the group has met approximately once per week. At other times, meeting frequency has been about once per month.

5. The TOG has been charged with submitting to the Project Director, for approval, proposed programs for the development and fabrication of collection vehicles, and with submitting to the Project Director for approval, proposed collection tasking schedules subsequent to launch of the vehicles. The TOG is also charged with reviewing the results derived from the on-orbit operations for the purpose of providing guidance to the ground sites, and to determining technical deficiencies for feed back to NRL. The TOG also monitors the processing of data collected from the project.

6. In general, for orbital operations, the TOG has functioned as follows:

a. It considers the intelligence needs which the mission can satisfy (as presented by ONI, STIC, and NSA).

b. It considers collateral information regarding current Soviet activity (as stated by STIC or NSA).

c. It considers the interrogations made on earlier orbits.

d. It considers the security problems posed by the interrogation process.

e. Based on the foregoing, the TOG prepares orbital tasking instructions which specify those orbits to be interrogated, when turn on should be made, etc. These tasking instructions are submitted to the Program Director for approval.

Copy 1 of 3 Copies
Page 2 of 3 Pages.

Control No.

f. Upon approval, the tasking instructions are passed to the Naval Security Group for implementation. The NSG serves as the executive agent for the Project Director in the accomplishment of the orbital collection operations. The NSG obtains and furnishes ephemeris information and other pertinent data such as frequencies, manner of recording, etc. to the ground stations.

7. All of the above is done quite informally with a minimum of written documentation.

8. The Naval Security Group, in accomplishing the orbital operations activities for which it is executive agent to the Project Director (as per 6f above), arranges for the manning of the collection huts located at the peripheral stations, and provides for all necessary communications and tape shipments. In the Washington area, the Naval Security Group has, in general, employed two officers and two yeomen on a full time basis in carrying out these functions.

~~TOP SECRET~~
SPECIAL HANDLING

TALKING PAPER

I. Given

1. The NRO will accomplish the following:

   a. Long range program planning against USIB requirements.

   b. Specific mission planning against current requirements.

   c. Orbital tasking decisions.

2. The NRO orbital operations activity will have the latest intelligence inputs immediately available on a scope which represents national inputs.

3. The NRO orbital operations activity will be responsible for all reconnaissance missions regardless of particular project.

4. The NRO operational procedures will follow similar patterns regardless of project.

II. The Objective at Hand is Two-Fold

1. To determine the best manner to utilize the TOG in support of the POPPY effort being conducted as an integral part of the NRP.

2. To assure that the NRO adequately supports POPPY in accomplishing certain functions previously the responsibility of the TOG.

III. The TOG Heretofore has had Responsibilities and Functions in Six Broad Areas for the POPPY Project

1. Performing program planning.

   a. Reacting to requirements presented by ONI, STIC, and NSA.

b. Establishing schedules.

c. Determining mission configuration (frequency bands, etc.)

2. Monitoring payload fabrication and ground equipment deployment (actually accomplished by NRL).

a. Technical trade-offs, equipment sensitivity, format, etc.

b. Ground station requirements, recording equipment, etc.

3. Performing orbital operations decisions.

a. Establishing schedules for delegation.

b. Coordinating time-sharing with other experiments.

4. Monitoring collection operations (actually accomplished by NSG).

a. Actual commanding turn-on of satellite.

b. Tracking and copy of readout at sites.

c. Transmittal of data to ZI.

5. Monitoring of processing (actually accomplished by NSA or SAC.)

a. Receive informal "quick look" data of significance.

b. Expedite preparation of mission reports by NSA.

6. Recommend and establish project administrative procedures for project director.

a. Central for project correspondence.

b. Liaison with BUWEPS for booster, funding, etc.

c. Security and clearances.

IV. Discussion

1. Functions 1, 3, and part of 6 (security, funding) clearly are the responsibility of the DNRO for all NRP projects.

2. Functions 2, 4 and part of 6 are unique to and internal to Navy execution of a delegated POPPY effort.

3. Function 5 properly should be a responsibility of the intelligence community (perhaps DIA). NRO has responsibility for this function only as regards technical feedbacks to the projects.

4. During the next few months the NRO staff structure will provide for an orbital operations activity capable of accomplishing the orbital tasking and rendering the operational decisions required. Inasmuch as the next POPPY effort is not scheduled until November, it should be possible for that mission to be operated by the NRO operations activity.

5. Augmentation to the NRO staff by addition of a Navy and a NSA individual concerned with electronic signal collection is providing the capability to accomplish program and mission planning for electronic collection efforts, such planning to be accomplished in conjunction with the planning for all NRP activities.

V. General

1. As a part of the NRP, the POPPY effort is considered as evolving into a mechanism whereby Navy talent (payloads from NRL and peripheral collection using the Naval Security Group) can be applied for appropriate collection efforts within the NRP. It is not considered as evolving into an allied but totally independent separate program run as an adjunct to other NRP efforts. Obvious economy and additional launch opportunities are afforded in the former case. An excellent example is the possibility of utilizing Westford launches to deploy POPPY type devices.

2. The management approach used by the Navy project director should be tailored accordingly.

Copy 1 of 5 Copies
Page 3 of 3 Pages.
Control No.

~~TOP SECRET~~

SPECIAL HANDLING

PROJECT CONCEPT*

*Note: The concept, as here presented, is primarily intended to illustrate how the Electronics Collection Program would function under the new NRO setup. None of the key words or concepts has received approval for implementation.

I. DEFINITIONS

1. ELECTRON is a code name which identifies the overall electronic signal collection program conducted within the NRP. ELECTRON encompasses major vehicle launches whose primary mission is electronic signal collection (SIGINT) as well as electronic signal collection efforts launched into orbit as secondary missions on other programs.

2. 698 BK is a project under ELECTRON. It identifies the SAFSP development program for, and schedule of major vehicle launches whose primary space mission is electronic signal collection (SIGINT).

3. 102 is a project under ELECTRON. It identifies the development program for major sophisticated payloads procured by SAFSP for use on vehicles allocated to 698 BK.

4. POPPY is a project under ELECTRON. It identifies the development program for payloads procured by the Navy for use either on vehicles allocated to 698 BK or on vehicles launched by other programs under cognizance of SAFSP.

5. EARDROP is a project under ELECTRON. It identifies the development program for payloads procured by SAFSP for use on a space available basis in any feasible space vehicle.

6. SUBSAT is a project under ELECTRON. It identifies the development program for payloads procured by SAFSP for use on orbital launched sub satellite (P-11) vehicles deployed by 698 BK launches, as well as by launches in other programs under cognizance of SAFSP.

II. SECURITY

1. CIA has been delegated security responsibility for ELECTRON and accordingly has similar responsibility for Project 698 BK, POPPY, EARDROP, SUBSAT, 102 compartments.

2. Access to Information:

ELECTRON is established under the BYEMAN Security System. Persons authorized access to ELECTRON, or any project thereof, must meet BYEMAN approval standards. They will be briefed only to the extent necessary to do their job.

New ELECTRON approvals deemed essential will be granted by the ELECTRON Security Headquarters (BYEMAN Security Officer, CIA).

New POPPY, EARDROP, SUBSAT, 102, 698 BK approvals deemed essential will be granted as above. Such approvals will permit briefing only as required for the compartment concerned.

3. Determining Need-to-Know:

Director SAFSP, Major General Greer, will determine ELECTRON need-to-know for people in industry under contract for 698 BK, EARDROP, SUBSAT, and 102, and for DOD people directly involved in the management or conduct of these efforts.

Project Director, POPPY, Admiral Lowrance, will determine ELECTRON need-to-know for people in industry under contract for POPPY, and for DOD people directly involved in management or conduct of POPPY efforts.

Office of SAFUS will determine ELECTRON need-to-know for DOD personnel not directly involved in management or conduct of ELECTRON or its project compartments (698 BK, POPPY, EARDROP, SUBSAT, 102).

BYEMAN Security Officer (BSO/CIA) will determine ELECTRON need-to-know for personnel in CIA, government agencies other than DOD, and industrial firms not under contract for ELECTON or its project compartments.

~~TOP SECRET~~
SPECIAL HANDLING

III. ORGANIZATIONAL REQUIREMENTS

1. The NRO staff will accomplish the program, mission planning, and orbital operations functions for projects under ELECTRON. This will be done using the functional NRO staff activity responsible in these areas for all programs. The NRO staff will include for SIGINT matters a Navy member and an NSA member who will participate in such planning and orbital operations activities when required for projects under ELECTRON.

2. Each functional NRO staff activity (planning, operations) will be free to utilize the advisory services of selected SIGINT qualified individuals from within the intelligence community in accomplishment of its functions when concerned with SIGINT. Such advisory individuals will be approved by DNRO from nominees provided by the head of each intelligence activity concerned, and will be provided with a letter assigning such advisory duty to the NRO staff as an additional duty to be accomplished upon request by Director, SAFSS.

(Note: The above would replace the TOG and "Termite" groups now established for POPPY and EARDROP, respectively, and would formalize the NRO working interfaces with the intelligence community on SIGINT matters.

IV. OPERATIONS

All operational requirements, priorities, and responses for projects under ELECTRON will be the responsibility of DNRO. Control of all vehicle operations following orbit injection will conform to the operational requirements as established by the DNRO, except for circumstances arising as a result of vehicle or payload technical difficulties wherein the decision of the project director is overruling. Project directors will execute orbital collection operations as tasked by the NRO staff operations activity.

V. PROGRAMMING AND FINANCIAL MANAGEMENT

1. Programming of funds, and financial management of the ELECTRON program is the responsibility of the DNRO, executed through the Director, Special Projects, for all projects under ELECTRON.

2. For covert procurements, the CIA channels for procurement authority releases and disbursement of payments will be utilized.

3. For procurements or in-house expenditures accomplished by Navy, or other services, appropriate funds transfer from AF to the concerned service will be accomplished.

4. Contract administration will be accomplished by the procuring service, under cognizance of the project director.

VI. TECHNICAL PROGRAM MANAGEMENT

Primary technical responsibility for the accomplishment of the ELECTRON program rests with the Director, Special Projects, OSAF. In this capacity, the Director, Special Projects will discharge all major decisions affecting the development, modification and delivery rates of all components of all projects within the program. Detailed technical responsibilities are delegated by the DNRO to the appropriate project director for the operation of the technical aspects of each project within the program.

VII. COMMUNICATIONS

1. Operational-administrative net:

This net will operate between the Director, SAFSP, SAFSS and the STC. Additionally, as appropriate, this net will be linked as required to the communications net employed by NSG in support of the POPPY project.

The net will conform to BYECOM requirements. The purpose of this net is to provide for the discharge of operational information during missions, and such administrative traffic as is appropriate.

2. Technical-Administrative net:

This net will operate between Director, SAFSP, major contractors, NRL, and NSA. The purpose of this net will be to provide for rapid and secure handling of technical and administrative matters. This net will meet BYCOM requirements.

Copy 1 of 3 Copies
Page 4 of 4 Pages.
Control No.