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BYEMAN CONTROL SYSTEM

NAVY ELINT SATELLITE PROGRAM

1. PROGRAM: Program "C" (Navy POPPY System)

a. Purpose. The POPPY System is an ELINT satellite system used as a general search ELINT collector for gathering ELINT information on radiating shore based, ship [] platforms on the earth. The system is capable of determining: frequency, [] pulse repetition rate and emitter location. POPPY satellites are transponder types giving immediate realtime readout to the monitoring ground station. The POPPY System is now regularly providing technical information and locations on Soviet ABM sites and is providing inputs to the Navy Ocean Surveillance data base.

b. Present Resources.

(1) Personnel Resources Involved. At present there are approximately [] military and [] civilian personnel permanently assigned to PROGRAM "C". This number will increase by about 10% in the next few years as program changes, resulting in significant system improvements, are incorporated.

(2) Material Resources Involved. The POPPY System consists of a family of four operating satellites served by [] ground readout stations. A family of four satellites is normally planned for launch every 18 months. Currently there is one "family" in orbit with a second scheduled for launch in late 1969.

c. Planned System. In the near time frame accuracy of target locations and speed of system response will be significantly improved by adding analog to digital converters to all ground readout sites. At present [] been funded for these converters and [] remain. [] fully operational with the converter and [] [] just commenced digital operation.

To get added coverage of new threat areas of the world- ([] [] for example) several new ground readout sites must be established in the Northern Hemisphere. To extend the coverage to the Southern Hemisphere, as threat areas develop, [] new ground stations will be required.

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The total number of ground stations required for world wide coverage can be reduced and the response of the system improved by installing readout sites aboard ship. The features of these mobile readout sites are currently under study.

During the 1980 time frame, in order to provide more extensive and timely location and tracking information, it will be necessary to have three to four families of POPPY Systems in operation simultaneously.

d. Command, Control and Communication Interface. Program C is a national program funded from national resources provided by the National Reconnaissance Office (NRO). The satellites are built by the Naval Research Laboratory and operationally tasked by the Commander Naval Security Group, under the Management of the Assistant Chief of Naval Operations for Intelligence (ACNO(I)).

System tasking guidance for the National assets is developed by USIB and its subcommittees (SIGINT Committee and SIGINT Overhead Reconnaissance Subcommittee) consisting of representatives from: State, Army, Air Force, Navy, CIA, DIA and NSA. Tasking requests are submitted to USIB and upon approval are implemented by the NRO through the Commander Naval Security Group to the groundsites. The [redacted] readout stations are multi-service: [redacted]

The intelligence product serves many users at the Fleet and National levels. Primarily, Ocean Surveillance information is forwarded directly to ACNO (I) for the Ocean Surveillance data base and ELINT tapes are sent to NSA for fine grain technical analysis.

2. RESPONSE OF SYSTEM:

a. Tasking Against Threat. The POPPY System is tasked to collect ELINT on emitting threat radiators within the satellite design parameters. The System is tasked against various ELINT targets of intelligence interest, such as: [redacted]

[redacted]
inaccessible areas.

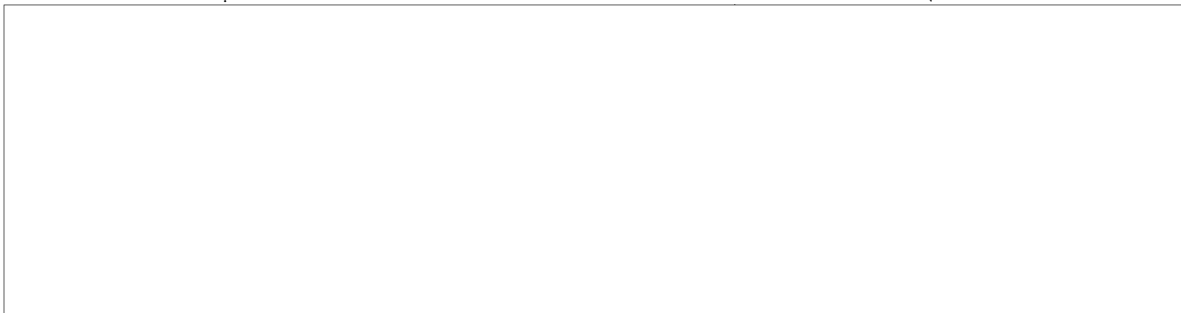
b. Meeting the Threat. Currently ELINT satellites are locating, tracking and identifying selected Soviet [redacted] ships on a real-time basis. In addition, ELINT information is collected on a regular basis and final analysis reports are distributed through the intelligence community for further dissemination to consumers.

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Consumers include the laboratories and R&D facilities charged with countering the foreign electronics threat in warning, reconnaissance and weapons systems. A secondary gain is the effect on an enemy of any ELINT collection program in causing to restrict his operations and thereby depriving him of useful electronics emission time. Restricting emission time will cause a decrease in radar protective coverage or R&D programs. While depriving the USSR in this manner, the U.S. is collecting valuable ELINT information on Soviet radar systems permitting the location and identification of Soviet emitters, a technical and tactical knowledge of the Soviet operation of these emitters and development of countermeasures to the Soviet systems.

c. Relation to National Effort. The POPPY System as part of the National Reconnaissance Program (NRP) has a specific role related to the other satellite systems in the NRP. The POPPY System is a general search ELINT satellite system designed specifically to search a wide swath on the earth's surface during each orbit. The information derived from POPPY is then used to direct other systems with different sensor capabilities and to the target of interest.

3. SOVIET CAPABILITIES/INTEREST.



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