U. NAVAL SECURITY GROUP ACTIVITY
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IN REPLY REFER TO:
~~PROJECT EARPOP~~ RLP: wr
BYE-57342-69
19 February 1969

From: Commanding Officer, U.S. Naval Security Group Activity
To: Commander, U.S. Naval Security Group Command

Subj: Review of POPPY Tasking for 1968

Ref: (a) My message 111345Z June 1968
(b) My message 131253Z January 1969
(c) My message 141200Z January 1969 (NOTAL)

Encl: (1) Breakdown by Task Groups
(2) Breakdowns by Data Links on each Satellite
(3) Task Group Proposals

1. During his recent visit, Lieutenant Commander USN expressed an interest in receiving a copy of the results of a local review of POPPY tasking for 1968. The findings are forwarded as enclosures (1) and (2). Explanations for the meaning of the figures in each column are provided with the respective enclosures. Unfortunately, some of the required data for January 1968 had been routinely destroyed before the decision was made to prepare a tasking review; therefore, the figures could only be developed for the eleven months from 31 January through 31 December 1968.

2. The tasking does not appear to have approached the designed capability of the 7105 Series satellites. Tasking has not been geared to maximum production of signals of interest and has not been designed to offer the opportunity for intercept of a profile of related signals of interest. Also, it is worth noting that some of the frequently assigned task groups are completely non-productive. The two most disturbing examples of tasking weakness have been reported in references (a) and (b).

3. It is considered that the task groups themselves are in need of review. As reported in reference (c) some previous constraints caused by crosstalk have apparantly disappeared. A proposal for a new set of task groups is submitted as enclosure (3). The five groups were developed after giving thought to the following:

a. Current crosstalk situations had to be isolated to prevent interference.

b. If a second data link is included in a channel with one of the extremely dense data links it will not be possible to perform an analysis of the analog recording. Discrimination by [redacted] becomes impossible when the data is too dense.

c. It is desirable to create task groups that will offer the opportunity on a single four-satellite orbit to intercept a profile of related radars; such as ABM-related, early-warning or shipborne.

d. A single task group should offer both production of signals of interest and the search capability in order to ensure that processing resources are fully exploited.

4. It is believed that simple rotation through the recommended task groups would provide greater yield from POPPY than the present system. It is hoped that enclosure (3) will be submitted to the tasking authority for consideration. It is believed that authority to the field sites for use of the recommended task groups on at least a trial basis would result in a significant improvement.

5. Based upon conversations with payload engineers at NRL it is believed that the life span of the satellites will not be affected by increasing the number of data links in each task group. Additionally, none of the proposed task groups will approach the total signal density in the present Group [redacted] with [redacted]

[redacted]

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HANDLE VIA BYEMAN
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BREAKDOWN BY TASK GROUPS

Column Explanations:

1. TASK GROUP: Identification number assigned to the group of data links. The NSGC-promulgated Summary of Command System Operation for the 7105 Series gives the makeup of each task group and specifies the radio frequency bandwidth for each of the data links.

2. PAYLOADS: Satellite identification letter. Both satellites are listed on the same line when the specific task group was not assigned during the period.

3. DATA LINKS: The identification numbers of the data links which are included in the specific task group. It is

[redacted]

constrained in accordance with my message 142330Z June 1967, drafted by Mr. LORENZEN. An apostrophe indicates that the constraint probably no longer exists as reported in my message 141200Z January 1969.

4. ORBITS TASKED: The number of times the specific task was assigned during the period 31 January through 31 December 1968.

5. PERCENT TASKED: The percent of total tasking assignments for the satellite that were given to the task group.

6. SUCCESS: Number of times that the satellite was activated in accordance with the specific tasking assignment.

7. PERCENT SUCCESS: Indicates the percent of missions activated in accordance with the tasking assignment.

8. DATA BRAVO: Indicates the number of missions for which data was heard from channel BRAVO. "NA" means that channel BRAVO is not included in the specific task group. "N" indicates that only the narrow transponder is used in the task group; "W" indicates that only the wide transponder is used in the task group, and "NW" indicates that both transponders are used.

9. PERCENT BRAVO: Percent that data was heard when channel BRAVO was successfully activated with the correct data links. Figures were not available to give the breakdown by respective transponders when both narrow and wide were tasked.

10. DATA CHARLIE: Same as column 8 for CHARLIE channel.

11. PERCENT CHARLIE: Same as column 9 for CHARLIE channel.

Enclosure (1)

3YIE 52,310-69

STAFF FORM 5300-2 (REV. 5-62) — CLASSIFICATION STAMP: TOP SECRET

TITLE OR SUBJECT OF SESSION

TAD TO [redacted] in connection with POPPY OPS

FROM (Date and time)	TO (Date and time)	[redacted]
04 FEB 68	22 FEB 68	

CHAIRMAN PRESIDING	SPONSORING ORGANIZATION
	HQS NAVSECGRU/NSA

PARTICIPANTS	AGENCY, ACTIVITY, OR ORGANIZATION
[redacted]	HQS NAVSECGRU/G524
	NSA K46 DEPUTY
	NSA K462 ANALYST

D078

[redacted]

BRIEF OF RESULTS AND PROCEEDINGS (If additional space is required, use reverse side or attach additional pages.)

1. The purpose of this visit was as follows:

a. Brief subject area HQS and POPPY field station personnel on the organizational structure and tasks/responsibilities of the various military departments and civilian agencies engaged in project POPPY operations.

b. Discuss operational and technical matters relating to POPPY operations with field station personnel and provide technical and analysis feedback in an effort to improve the quality of data derived from this project.

c. Visit to [redacted] on 04 February and NSA REP [redacted] on 11 February was accomplished while awaiting transportation to [redacted] Briefing provided [redacted] and [redacted] was limited to status of current operations, technological improvements in payload design, ground interrogation/collection equipments and utilization of digital/computer equipments at Navy field stations with emphasis on development of [redacted] location technique for Ocean Surveillance.

2. The POPPY representatives briefed all EARPOP cleared officer and enlisted personnel at each field station and discussed the following:

a. Responsibilities of Project Director (COMNAVINTCOM), COMNAVSECGRU, NRL, DIRNSA and SAFSS as related to collection requirements, management, payload design and configuration, interrogation/collection operations, administration, security, training,

*G50T_____ G50B1_____ G50B_____ G50_____ GC_____ GB_____

		INITIAL	PREPARED BY (Signature of participant)	DATE
From:	G524			
Via:	*See Above		[redacted] G524B	03 March 1969
To:	G			
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billet structure, personnel clearances and analysis/processing of data.

b. Preparation of emphemeris, tasking and technical information related to standard operating procedures and equipment.

c. Establishment of a new section within [redacted] which will devote full time on analysis, location and dissemination of end product derived from POPPY data.

d. Disposition of POPPY tapes and associated material upon receipt at NSA.

e. Preliminary quality control analysis of POPPY tapes and generation of technical feedback by NSA SPO to all collection sites.

f. NSA techniques in manual and digital processing of POPPY data.

g. Technical description and tentative launch date of MSN [redacted]

h. NRL plans to update interrogation/collection equipment and programmed installation of digital/computer equipment at [redacted]

i. Brief explanation of [redacted] location technique with emphasis on Ocean Surveillance. (This briefing to [redacted] only.)

3. Following each briefing, discussions were held with the Project Officer and operator/maintenance personnel. During this period, all personnel were requested to bring forth any comment, constructive criticism and/or suggestions that might improve overall System POPPY operations.

4. Subsequent to each briefing, the POPPY operations spaces were inspected and the visiting group participated in tasked interrogation/collection operations.

5. The following is a recapitulation of discussions and problems noted at each field station:

a. [redacted] (Visit -- 5-8 February)

(1) The Commanding Officer and his POPPY staff indicated that there have been very few problems with the program and the morale and enthusiasm of all POPPY personnel are extremely high.

(2) The current billet allowance for ET 2755 (ELINT analyst) is one. A request has been submitted to COMNAVSECGRU for an increase of three additional billets. The station was advised that the number of operator/analyst billets allocated to [redacted] POPPY Navy field stations is the same. While the request for an increase by three additional ET 2755 billets would not be approved, action would be initiated to reduce the number of ET 1955 (operator) billets by three and add three ET 2755 billets to their overall POPPY structure.

(3) The ambient noise levels in the vicinity of the POPPY OPS building is maintained at a minimum. A NAVCOMMSTA instruction prohibits vehicular traffic travelling on the road adjacent to the POPPY building during interrogation/collection operations.

(4) Some maintenance problems are being encountered with the recorders/reproducers used for recording of POPPY data and at the QC position. The station requested that the feasibility for replacing these recorders be investigated. The station was advised that since an effort was currently

underway to obtain $420,000 from NRO comptroller for procurement of digital recorders and computers for [redacted] the feasibility of replacement of the analog recorders at this time is remote. However, the matter would be discussed with NRL.

(5) Considerable difficulties have been encountered during the past two months with interrogation of MSNS [redacted] Attempts to interrogate tasked data channels resulted in activation of data channels other than those commanded. ALFA and BRAVO payloads arrived in the area either in enable condition or a number of data channels activated. These interrogation difficulties and possible malfunctions had been reported to DIRNSA, COMNAVSECGRU and NRL. The station was advised that NRL would be requested to conduct an engineering evaluation to determine the reason for existing difficulties.

b. [redacted] (Visit -- 12-14 February).

(1) Two POPPY collection positions and the quality control position at this field station are located in the [redacted] building which is approximately two miles from the [redacted] operations building. The operational status of all POPPY equipment is excellent. Although vehicular traffic flowing to and from this building is not controlled, it is limited to those personnel assigned to [redacted] operations and ambient noise levels are not sufficient to adversely effect quality of POPPY data.

(2) Discussions with [redacted] operations and POPPY Project Officer, indicated that personnel assigned to POPPY operations are taken from [redacted] operations personnel compliment. ELINT operations/analysis background and experience of these personnel is limited. It was recommended by the Project Officer that supervisory and analysis personnel from [redacted] be assigned TDY to [redacted] for a period of approximately 10 days for familiarization in analysis techniques and exchange of ideas among POPPY analysts of both field stations. The Project Officer was advised that this proposal would be extremely beneficial and would be coordinated with [redacted] COMNAVSECGRU, CGUSASA for approval.

c. [redacted] (Visit -- 17-20 February).

(1) Operational status of this field station is excellent. Complete control of vehicular traffic to and from POPPY OPS building is exercised during interrogation/collection operations. The morale and enthusiasm of all project personnel are outstanding.

(2) Modification of interrogation antenna to provide azimuth and elevation capability was completed by NRL engineers on 12 February. Spaces for installation of digital/computer equipments were completed by HRB Singer and station personnel. Digital/computer equipments were scheduled to arrive on board 02 March and installation tentatively scheduled for the end of March.

(3) Preliminary plans and cost estimates for construction of a 25 x 40 foot extension to POPPY operations building were completed by Public Works and ready for submission to COMNAVSECGRU via appropriate channels for approval. Cost estimates are $24,900 and will be provided by NRL. An additional $2000 was requested from COMNAVSECGRU/NRL for preparation of formal plans and specifications in connection with construction of this extension.

(4) It is planned to update the POPPY power facilities by replacing a 25 KW Auto start diesel generator with a 100 KW no-break unit available on board. Updating of these facilities would cost approximately $5,500 and will be provided by COMNAVSECGRU/NRL.

(5) [redacted] was in the process of preparation and submission of required forms to DIA for accreditation for TANGO/KILO stowage area. Deficiencies reported by a DIA inspection team in July 1968 for BYEMAN accreditation have not been corrected. These deficiencies included erection of a 10 foot protective chainlink fence on the perimeter of POPPY OPS building and other building alterations. Cost for correction of these deficiencies was estimated at $16,000 which was requested from COMNAVSECGRU. Authority for expenditure of $10,000 for erection of the protective fence was received on 17 February and work was scheduled to commence immediately. $6,000 for building alterations, such as sealing off the crawl space and installation of an ultra-sonic alarm in airconditioning ducting, has not been received. Based on this DIA may raise some questions regarding TANGO/KILO accreditation. The station was advised that the matter would be discussed with GD to determine if additional funds could be made available at this time.

(6) The Project Officer indicated that number of ELINT publications held is very limited and requested that action be initiated to provide the Project with copies of all publications required in support of Ocean Surveillance and place them on distribution for revisions thereto. In addition, he requested that [redacted] be placed on electrical distribution for NAVINTSUMS, COMINTSUMS and other collateral intelligence information. The station was advised that this would be accomplished upon return to HQS NAVSECGRU.

(7) MSN [redacted] interrogation difficulties reported by [redacted] were discussed with project supervisory/operator personnel. They indicated that they have had no problems with interrogation of either payload.

6. Action has been initiated to eliminate problems or deficiencies reported by each field station.

7. In conclusion, it is felt that this visit was extremely beneficial in that, it provided an opportunity to emphasize the scope and importance of this project and the significant role and contributions made by POPPY field station personnel in support of national and future naval intelligence requirements. It is recommended that future visits to POPPY field stations be initiated by COMNAVINTCOM/COMNAVSECGRU with one Navy representative and one from NSA.