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REMARKS

NRL INCOMING DOCUMENT



B 228-75



3



BYE-59570-75

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I-INFORMATION
C-COMMENT
R-RETAIN
E-EVALUATION

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COMMENT	FILE	RETURN
CONCURRENCE	INFORMATION	SIGNATURE

REMARKS:

FROM: NAME, ADDRESS, AND PHONE NO. DATE

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Channels

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Sensitive Intelligence Sources and Methods Involved

NATIONAL SECURITY INFORMATION

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NAVY SPACE PROJECT OFFICE
~~(S)~~ NATIONAL RECONNAISSANCE OFFICE, PROGRAM C
WASHINGTON, D.C.

OFFICE OF THE DIRECTOR

PME-106-543/1c

8 SEP 1975

MEMORANDUM FOR THE DIRECTOR, CENTRAL INTELLIGENCE AGENCY (OSI)
 DIRECTOR, NAVAL RESEARCH LABORATORY (1000, 7030)
 CHIEF OF NAVAL OPERATIONS (OP-955)
 COMMANDER, NAVAL SECURITY GROUP COMMAND (G54, POCG)
 DIRECTOR, NATIONAL SECURITY AGENCY (A81, R24, W2, W34)
 DIRECTOR, NATIONAL RECONNAISSANCE OFFICE (SS4, SS4A, SS7)

Subj: POPPY Technical Operations Group (TOG) Meeting; report of

Encl: (1) Agenda
 (2) List of Attendees
 (3) Mission 7107 Status
 (4) Collection Highlights
 (5) Processing Highlights



1. The POPPY Technical Operations Group met at 0930 on 28 August 1975 at the National Security Agency. The meeting agenda and a list of attendees are forwarded as enclosures (1) and (2).

2. The Naval Research Laboratory representative submitted enclosure (3), a status report on the POPPY satellites. A POPPY engineering evaluation will be conducted from [redacted] the week of 10 November 1975. Included in the report will be an assessment of the condition and the expected lifetime of the satellites. Such a prognosis will be a valuable

3. Several action items were taken during a lengthy discussion about the level of POPPY operations that can be maintained during the [redacted]

[redacted] The representative of the Chief of Naval Operations (OP-955) will initiate a request for a cost-benefit analysis in order to determine the cost of continuing to produce ocean surveillance information from POPPY satellites. In order to respond to queries related to phasing down POPPY operations and to conduct tradeoff studies, the Navy Space Project Office representative will initiate action to form a multiple organization working group.

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~~TOP SECRET EARP~~ **POPZARF**

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Subj: POPPY Technical Operations Group (TOG) Meeting; report of

4. The Naval Security Group Command (POCG) representative submitted enclosure (4) which contains operational highlights for August. It was pointed out that signal [] associated with the Soviet aircraft carrier KIEV, has been intercepted from other sensors but not from POPPY. Knowledge of the [] characteristics will be required in order to determine whether POPPY should be receiving the signal and []

5. August processing highlights were reported by the National Security Agency representative and are forwarded as enclosure (5). It was also reported that the DEPARTURE contract for processing POPPY tapes was awarded to HRB Singer Corporation, State College, Pennsylvania, on 20 August. The first assigned task is for the analysis and reporting on the data associated with the POPPY system calibration conducted in late May of this year at []

6. A viewgraph briefing was presented by the Navy Space Project Office on the usage and characteristics of Soviet [] and on the degree of exploitability of such radars by POPPY []

7. The next meeting will be hosted by and held at the Naval Research Laboratory on Thursday, 25 September at 0930.


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AGENDA

MISSION 7107 STATUS

GROUND SITE STATUS

COLLECTION HIGHLIGHTS

PROCESSING HIGHLIGHTS

NRL



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Enclosure (1) to BYE-59,570-75

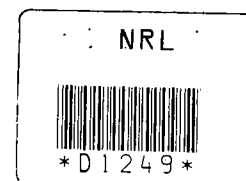
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LIST OF ATTENDEES

NRL Mr. Lawton
Mr. Frankovic (HRB)

CNO [Redacted] P-955)

CNSG [Redacted]
LCDR Morgan (POCG)

NSA [Redacted]

NRO [Redacted]

LCDR Potts (NSPO)

[Redacted]

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Enclosure (2) to BYE-59,570-75

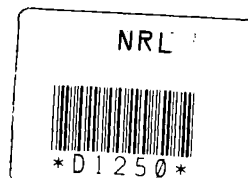
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MISSION 7107 STATUS

During August the Mission 7107 satellites have progressed through a period of minimum sunlight and have been performing well. For a five day period one-hundred percent sunlight will now be encountered.

There have been instances of site failures to reset the vehicles before satellite departure over the horizon. Field sites have been alerted to the failures and collection durations have been shortened to permit easier re-setting.

Current spacing for 7107 Alfa/Bravo is [] nautical miles and closing at the rate of 0.005 nautical miles per day. Spacing for 7107 Charlie/Delta is [] nautical miles and closing at the rate of 0.3 nautical miles per day. 7107 Charlie will be thrust commencing 2 September in order to increase the spacing between Charlie and Delta.

Operational down time in support of the engineering evaluation at [] will be requested. Three revolutions daily for each [] will be requested for a three day period.

Enclosure (3) to BYE-59,570-75

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COLLECTION HIGHLIGHTS

Ocean Surveillance: [] reporting has been at a moderate level since the last TOG meeting. 4670 shipborne radar locations were reported this month, 603 directly associated with major combatants, naval auxiliaries and space support vessels. Of these, approximately fifty-four percent were equated to specific hulls.

There were seventy six locations of [] reported. Four of these were [] intercepts emanating from the Barents Sea, White Sea and Sea of Japan. The unusually high number of [] intercepts was because of a [] transit from the Mediterranean to the Northern Fleet.

An unusually high level of activity is being noted in the fleet areas partly due to operation Silver Fox in the Black Sea. KRESTA II CLGM ADMIRAL NAKHIMOV departed the Barents Sea. The KRIVAK DDGSP BODRYI departed the Baltic Sea to conduct surveillance of the USS NIMITZ which has transited from the east coast to hold operations in the North and Norwegian Seas. Icebreaker IVAN SUSANIN has transited through the Bering Strait and is holding operations in the Chukchi Sea. AGI ZAPOROZHE has transited the Atlantic and is operating off the U.S. East Coast.

[] assigned the first arbitrary designators of [] and [] to [] emitters based on many intercepts of their stable PRF's. Both are believed to be from the same platform. Respective ranges are 842.524 - 842.529 PPS and 1685.052 - 1685.060 PPS.

Technical Intelligence and Electronic Order of Battle: Intercept data from the Middle East in support of Project FLAVOR has been exceptionally light. Only three intercepts of SA-6 associated emitters were reported. All were geolocated to []

Ninety revolutions were collected in support of the SIM task. SIM data were collected on target emitters [] [] collected no SLM data due to higher priority Sea of Okhotsk full ocean surveillance coverage.

[] again intercepted several signals from the Black Sea area that appear to be associated with the [] family. PRF's of 1685 and 842.5 PPS were displayed equating to the 48th and 96th countdowns of the 80.833 KHz, one nautical mile crystal.

Emitters [] were added to the POPPY SOI list during the reporting period. Signal [] had previously been reported as UNIDENT []

Enclosure (4) to BYE-59,570-75

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PROCESSING HIGHLIGHTS

Plane of Scan Determined on DRUM TILT: On 31 October 1974, during orbit 14441, Mission 7107 Charlie/Delta intercepted a variant [redacted] signal that was geolocated to Sevastopol Harbor in the Black Sea. The identity of the Soviet vessel carrying this radar was not determined. The signal had not been reported by [redacted] but was detected during the analysis of an unidentified signal that had been reported and forwarded. Signal characteristics were as follows:

RF: Intercepted in the 6675 - 7940 MHz band
PRF: 1707.175 PPS, \pm 329 PPS
Scan: 6.70 SPR, circular, with 45.872 Hz unidirectional sector scan superimposed on the circular scan

The nominal 1707 PPS PRF has been observed occasionally from the [redacted] but is not documented. 1707 PPS equates to the 48th countdown of the 81932 Hz crystal. Analysis of the scan indicated that the [redacted] was utilizing a vertical unidirectional sector scan superimposed on the circular scan. Both the KILTING and EPL sources note that the plane of scan of the [redacted] emitter is undertermined and of interest.

[redacted] Effective Radiated Power and Beam Pattern Measurements: Eight Mission 7107 tapes were recorded with SLM activated during [redacted] intercepts. [redacted] is a J-Band (14.2 - 15.0 GHz) airborne radar used for navigation, blind bombing, search or target acquisition.

The report of the analysis provided the initial assessments of the [redacted] The eight recordings, collected from 16 January through 25 December 1973, produced the following information: (1) All observed scan rates and PRF's were within published limits; (2) The maximum observed ERP was 111.9 dbm \pm 1.5 db; and (3) The average 3 db point horizontal beam-width observed was 1.38 degrees \pm 0.64 degrees.

Enclosure (5) to BYE-59,570-75

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