(TICKLER) [redacted]

2.

NRL SPE[redacted]L PROJECTS CONTROL NUMBER

NRL BTK-187-75

~~TOP SECRET~~ - HANDLE BTK CHANNELS

DATE: UNDATED

ORIGINATOR: PME 106-543

SERIAL NO.: BYE 59,516-75

ENCLOSURES: (1) AGENDA (2) LIST OF ATTENDEES (3) MISSION 7107 (4) COLLECTION HIGHLIGHTS (5) PROCESSING HIGHLIGHTS

DATE REC'D: 22JUL75

TICKLER DATE:

COPY NO.: 10

RECEIPT NO.: h/c

SUBJECT: POPPY TECHNICAL OPERATIONS GROUP MEETING REPORT OF 26JUN75

DIST INFO:

☐ BASIC DOCUMENT ON R/S ______

☐ BASIC DOCUMENT NOT HELD. DESTROY.

ROUTE TO	*	CY NO.	W/ ENCL	SIGNATURE	DATE OUT	DATE RETURN
1000						
7000						
7030		10				
1225		11				
7				[signature]	7/31/75	
7030				[signature]	7/31/75	
7032				[signature]	8/11	
7033				[signature]	8/25	
Lawton				has seen		

Botta / mayo
[signature] 7/2/97

CODES HAVING PRIMARY INTEREST CHECK ONE

☐ RETAIN INDEFINITELY. (REFERENCE VALUE).

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☐ DESTROY AFTER ROUTING. (NO FURTHER REFERENCE OR INFORMATION VALUE).

DESTRUCTION REPORT NO.:

FINISH FILE: 7.2

REMARKS: TOG Minutes

NRL INCOMING DOCUMENT
B187-75
10
BYE-59516-75

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K-RETAIN
E-EVALUATION

RETURN THIS RC... SPECIAL PROJECTS OFFICE, ROOM 222, BLDG. 43.
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ACTION TAKEN BY

NRL CONTROL RECORD NDW-NRL-5216/1005 (REV. 3-72)

~~TOP SECRET~~ ZARF

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

OFFICE OF THE DIRECTOR

PME-106-543/1c

MEMORANDUM FOR THE DIRECTOR, NATIONAL SECURITY AGENCY (A81, R24, W2, W34)
DIRECTOR, NATIONAL RECONNAISSANCE OFFICE (SS4, SS4A, SS7)
DIRECTOR, CENTRAL INTELLIGENCE AGENCY (OSI)
DIRECTOR, NAVAL RESEARCH LABORATORY (1000, 7030)
CHIEF OF NAVAL OPERATIONS (OP955)
COMMANDER, NAVAL SECURITY GROUP COMMAND (G-54)

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 1000 on 26 June 1975 at the National Security Agency. The meeting agenda and a list of attendees are forwarded as enclosures (1) and (2).

2. The following topics were discussed:

a. Mission 7107 Status. Enclosure (3), describing the status of the POPPY satellites, was provided by NRL. Current spacings are within the established operational limits of fifty nautical miles minimum and one hundred and fifty nautical miles maximum. Therefore, no thrusting maneuvers are anticipated.

b. Ground Site Status. The NRL representative agreed to inquire into the status of the outage of the backup buffer tape system recorder at [redacted] for the past nine months. All POPPY sites are in full operation. Outages during the month have been minor and short in duration. Ten [redacted] personnel will be sent for temporary duty to support [redacted] when a group of five experienced [redacted] personnel depart for [redacted] training.

c. Collection Highlights. Enclosure (4) was provided by the CNSG representative and indicates significant productivity against technical intelligence, ELINT Order of Battle and ocean surveillance tasks.

d. Processing Highlights. The NSA representatives provided enclosure (5) which contains a summary of results on a possible new mode for the Soviet [redacted] navigation radar and the latest information on a high interest unidentified signal reported from [redacted]

~~TOP SECRET~~ ZARF

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

e. Site Operations. During the May TOG meeting, the suggestion was made that the POPPY satellites be evaluated later this year to estimate how long they can remain productive. Such an estimate would be a factor in planning for site closures, disposition of POPPY assets and in planning for personnel allocations to POPPY an[redacted] Some points emerged from the general discussion.

(1) Several members expressed opinions that Mission 7107 could have years of productive life remaining since satellite operations are being regularly curtailed during periods of low sunlight and since none of the satellites have displayed the traditional sign of degeneration, data loss.

(2) Termination of POPPY operations at [redacted] on 31 October 1975 and at [redacted] on 31 March 1976 remains scheduled.

(3) Due to the high level of activity scheduled for [redacted] with limited working space available, it is highly desirable that POPPY operations be terminated after [redacted] Short of termination, POPPY operations could be simply suspended for the duration of the [redacted]

f. [redacted] Engineering Evaluation. The NRL representative read the text of the NRL wrap-up message (091400Z JUNE 75, CITE 0951) on the engineering evaluation of Mission 7107. The recommendation was made that consideration be given during the August-September timeframe whether, where, and when to hold another engineering evaluation. The suggestion was made that [redacted] be the site of the next evaluation in order to avoid interference with [redacted] activities at other sites.

g. POPPY Calibration Results. Effective radiated power is the primary parameter of interest in the calibration of bands fourteen and fifteen. Data was received and looked good. There were no problems with the calibration vans. Tapes arrived at NSA during the past week and will be analyzed immediately. NSA R244 will receive the results of the analysis and disseminate to other parties.

h. [redacted] Output. There was a discussion of the CNSG message (151847Z MAY 75, CITE 0597) which describes the reductions planned in the [redacted] mission to accommodate the loss in personnel. The CNSG representative agreed to report on the size of the analog tape inventory at [redacted] the amount of space available for storing tape and what size inventory could be managed.

PME-106-543/1c

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

3. The next TOG meeting is scheduled for 0930 on 31 July and will be hosted by CNSG at the Naval Security Station.

R. T. DARCY

~~TOP SECRET/~~EARPOP/ZARF

~~TOP SECRET~~ EARPOP AGENDA

MISSION 7107 STATUS

GROUND SITE STATUS

COLLECTION HIGHLIGHTS

PROCESSING HIGHLIGHTS

[redacted] OPERATIONS

[redacted] ENGINEERING EVALUATION

POPPY CALIBRATION RESULTS

~~TOP SECRET~~ EARPOP ZARF

Enclosure (1) to BYE 59,516-75

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BYEMAN-TALENT-KEYHOLE
CONTROL SYSTEMS JOINTLY

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BYEMAN-TALENT-KEYHOLE
CONTROL SYSTEMS JOINTLY

LIST OF ATTENDEES

SPO	LCDR POTTS
NSG	LCDR MORGAN
NSA	
NRL	
NRO(SOC)	

~~TOP SECRET~~/EARPOP/ZARF

~~TOP SECRET~~/EARPOP/ZARF

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MISSION 7107 STATUS

The satellites have gone from minimum to full sunlight since the last TOG meeting. The reduced tasking on 7107A has apparently helped bring the satellite through the extended low sunlight period. Voltages appear to be satisfactory. There were some timer problems about the time the vehicles entered full sunlight, but they have apparently disappeared.

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Enclosure (3) to BYE 59,516-75

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COLLECTION HIGHLIGHTS

1. Technical Intelligence and EOB:

Intercept data from the Middle East in support of Project Flavor has been exceptionally light. Only four intercepts of SA-6 emitters were reported. Three were geolocated to

SLM data were collected on target emitters Developmental signal was also intercepted in SLM. Signal exhibited a maximum binary count of three and was geolocated to the Peoples Republic of China at 39-48N, 116-52E.

Seven intercepts of were accomplished by on 18 June. All emissions were geolocated to an area south of Irkutsk on the Monglian border. These intercepts represent the first indication of SA-8 deployment to this area.

Development signal was intercepted on 6 June and exhibited a PRF of 3188.335 PPS and an STI scan rate of 4.12 SPR. Emission also used the normal 2.06 SPR scan for portions of the intercept. Similar pulse counts were noted from both scans thereby indicating emitter hardware probably uses back to back reflectors. A horizontal beamwidth of 2.2 degrees was measured on the 2.06 SPR scan. Emission was intercepted at vertical angles of 0-13 degrees.

has intercepted several signals from the Black Sea that appear to be associated with the family. Emissions display PRF's of 1685.0 and 842.5 PPS. Emitter bears a resemblance to both the radars. The PRF equates to the 48th countdown of an 80.833 KHZ 1NM crystal. The crystal frequency is that which is normally associated with the radar; however, the countdown cannot be associated with that of the circuitry. The countdown does however compare favorably with the circuitry normally associated with the radar.

has also observed intercepts of recently that are considerably more stable than one would expect of Stability when measured with Doppler correction is in the area of 0.8 nanoseconds. These intercepts could represent the use of a new PRF generation circuitry in an updated emitter.

2. Ocean Surveillance:

reporting has been at a low to moderate level since the last TOG meeting. No major Soviet exercises have been observed. Over 2800 shipborne locations were reported this past month, 852 directly associated with major combatants, Naval auxiliaries, and space supported vessels. Of these, approximately 59 percent were equated to specific hulls. There were 59 locations of reported. Six reflected activity of the PACFLT in the Sea of Japan. activity from the Sea of

Japan and Petro areas was higher than normal during the period 17-23 June. Four major combatant transits were covered during the period. This included the return of the KANIN Group from the Caribbean to the Barents, a KRESTA Relief Group transit to the MED, return of a KASHIN from the MED to the Baltic, and a two unit relief force transit from the Black Sea to the MED.

~~TOP SECRET~~ ~~CARVE~~ ZARF

PROCESSING HIGHLIGHTS

NRL

D1200

SOVIET NAVIGATIONAL RADAR PROBABLY [redacted] ASSOCIATED

1. Soviet Navigational Radar Probably [redacted] Associated.

Since April 75 [redacted] has been intercepting a distinctly different I-band navigational radar from the Black Sea, North Sea and Mediterranean Sea. The emitter bears a resemblance to the [redacted] radar.

Parameters:

Black Sea Unit
RF 9340-9600 MHZ
PRF 842.524-842.526 PPS
1685.048-1685.059 PPS
SCAN 3.79-3.81 SPR

North Fleet/Med. Unit
RF 9340-9600 MHZ
PRF 1685.110-1685.112 PPS
3370.091 PPS
SCAN 3.80-3.85 SPR

Based on limited data the detected beamwidth falls within a range of 1.6-1.9 degrees.

The intercepts have been reported as [redacted] due to parametric similarities; however, several differences do exist: PRF generation crystal frequency, the 3.8 SPR scan, and a PRF of 1685 PPS.

All intercepts of this emitter display PRF's equating to either the 96th, 48th or 24th countdown of a 1NM crystal in the range of 80.882-80.885 KHZ. The Black Sea unit appears to peak at 80.883 KHZ and the North Fleet/Med Unit peaks at 80.885 KHZ. [redacted] PRF's equate to the 24th, 72nd and 96th countdown of a 1NM crystal ranging from 80.90-80.93 KHZ.

The 3.8 SPR scan associated with the signal is also different than the peak scan range normally associated with [redacted] Sixty five [redacted] intercepts for a one month period from 7107 utilized scan rates ranging from 3.69-3.76 SPR (3.73 average).

W34 is working in conjunction with [redacted] W22 and A81 in an attempt to resolve this signal.

All data sources are being searched for additional intercepts. Intercept dates and locations (out of area) are being checked in an attempt to associate the signal to specific combatants.

Enclosure (5) to BYE-59,516-75

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A recent search of the SEDSCAF data base has revealed numerous intercepts of the signal which were identified as [redacted] and date back as far as 1971. Additional research has revealed several reported visual correlations of the 1685/3371 PPS signal to Soviet combatants. In June 1971 the signal was intercepted using a PRF of 842.75/1685.50 PPS with a scan rate of 3.8 SPR and was visually correlated to a KANIN DDG. In March 1972 another intercept of 1685.61/3371 PPS with a 3.76 SPR scan was also correlated to a KANIN DDG. Recently a 1685 PPS PRF with a 3.7 SPR scan was intercepted and reported as being visually correlated to a KRESTA I. There were three KRESTA I combatants in the area at the time. Accuracies of the above mentioned parameters are not yet defined.

Additional research is required before firm conclusions are made. Based on available past intercepts, postulation is that a 1685 PPS PRF mode exists for [redacted]. The reason for the difference in crystal frequencies between normal [redacted] intercepts and the signals reported by [redacted] is not known at this time.

2. [redacted]

Another intercept of this signal was collected by [redacted] (Mission 7107C) on 21 June. Although this was one of the revolutions tasked by NSA for optimum collection, the signal was only intercepted through the on board RETEP receiver. The 815-970 MHZ Band was activated; however, no signal activity was noted. Initial intercept occurred as the payload was over the Southwest coast of [redacted] Payload geometry coincides with a previous intercept where the signal was only heard through RETEP and not the normal collection band. In both instances the payloads continued on to fly over Kirov, USSR, over which intercepts were earlier collected in the in the normal collection band. However, in both instances the signal was not heard.

This is, to date, the longest intercept of [redacted] in that the signal was up for a solid 84 seconds. The next longest intercept was only 30 seconds in duration.

It should be noted that collection through RETEP receiver and not the normal collection band is probably due to receiver sensitivities, RETEP having the greater sensitivity.