

NRL B-000146-72

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SUBJECT			
POPPY Technical Operations Group (TOG) Meeting; report of			

ENCLOSURES

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~~(S)~~ NATIONAL RECONNAISSANCE OFFICE, PROGRAM C

WASHINGTON, D.C.

PM-16-411/wtc
26 June 1972

OFFICE OF THE DIRECTOR

MEMORANDUM FOR DIRECTOR, NAVAL RESEARCH LABORATORY
DIRECTOR, NATIONAL SECURITY AGENCY
DIRECTOR, CENTRAL INTELLIGENCE AGENCY
DIRECTOR, NRO STAFF (SS-4) (SS-7)
COMMANDER, NAVAL SECURITY GROUP

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

1. A TOG meeting was held at 0930, 18 May 1972, at NRL.
The list of attendees and agenda are forwarded as enclosures
(1) and (2).

a. 7107 Status

(1) NRL - The thrusting operation planned in 2 steps
to spread and park the 7107 [] orbit
apart and intended to begin 18 May were postponed.
The delay was caused by lack of sufficient sun exposure to
provide proper power for the high wattage heaters used in
each thrusting satellite for generation of anhydrous ammonia.
Thrusting will next be attempted 22 May. Due to the undeployed
gravity gradient boom and consequent lack of a stable thrusting
platform, 7107C will not be thrusting.

(2) NSG/NRL/PM-16 - The exact start date for the
engineering evaluation of 7107 will be dependent upon the
thrusting schedule and also upon projected Soviet exercise
activity.

b. 7107 Collection Highlights

(1) This period saw considerable tactical and tech-
nical intelligence collection by 7107. Four tapes from []
were forwarded with [] signals having a postulated
SA-5 association. [] continues to be a primary []
[] candidate.

(2) NSG - Continuing study suggests that the ellipse
confidence region data currently output with 7107 geolocations
is more stringent and pessimistic than real, calibrated
POPPY location errors would support.

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

(3) NSG - The recent SA-6 deployment into [] highlighted multisensor collection and correlation at its best. Overhead photo reconnaissance first indicated the SA-6 deployment; this evidence in turn triggered SAC Ferret flights and alerted the overhead SIGINT sensors. Within several hours of the alert, [] collected and processed two SA-6 locations near []. It should be possible to compare further locations generated by [] with photo locations for accuracy comparisons of POPPY SA-6 fixes.

(4) During the preceding week some 350 [] locations were produced, reflecting somewhat higher levels of European area springtime activity and much increased tasking/collection in the Pacific resulting from U.S. mining operations off North Vietnam. Previous [] intercepts ran approximately 150-200 per week under regular tasking.

(5) NSG - J-Band coverage was included in the [] task group design for ocean surveillance of a J-Band guidance signal with three surface to surface missiles fired at the USS Stoddert while she was providing gunfire support off North Vietnam. Also of interest is the intercept by [] of an apparent J-Band component of POP Group in the 12.5-14.5 GHZ range seen in PRF synchronism with the G band POP Group component.

(6) NSG - [] is currently averaging 1 hour and 40 minutes to process and report [] intercepts and 6 hours for secondary signals.

c. Processing Highlights

(1) NSA - Results of data processing and analysis at NSA indicate crosstalk on the 4800-5000MHZ bands, SLM task group, with I bands in 7107C/D. 7107D band 8 displays crosstalk into band 1 and 2. 7107D SLM options have also shown dropout of the 8 bit in a predictable fashion, although sometimes it is possible to go up to very high signal levels without this dropout occurring.

(2) NSA/NRL - NSA intends to fund calibration of the 7107 SLM option before the end of FY72. In the event that the calibration van cannot be brought back quickly to [] for calibration operations, this effort will probably have to wait until the return of the SEL 810A computer from [] in Sep 1972.

PM-16

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Report of

(3) NSA - Several radar engineers will be brought to the NSA [redacted] Their function will be to perform signals analysis on the SEL 810 computer currently undergoing checkout by HRB Singer.

(4) NSA - Fourteen new analog pulse width selectors are being ordered. Nine will be distributed to the field sites for use in on-line analysis of pairwise intercept data.

(5) NSA - SLM collection remains of a very high value in technical intelligence. The basic philosophies for SLM tasking are to use 7105/06 missions as tipoffs to Mission 7107 of SLM-interest activity or to collect SLM against all orbits appropriately tasked and within certain EQX ranges promising high probability of target activity. The older technique of on site target recognition/satellite reinterrogation is unsatisfactory because of the loss of lower beam elevation data. It is the desire of NSA to collect 5-6 outstanding intercepts against each of about 40 signals. In the case of the SA-6 radar system, much more must be done to correlate power levels, beam shapes, and modes of operation. For this and other similar technical intelligence applications, close cooperation and personnel exchange needs to be implemented to achieve best processing and product correlation.

(6) NSA - Of special interest are the [redacted]-like signals intercepted from Sary Shagan During SA-5 launch and tracking operations. The parameters resemble those of [redacted] except for an unstable PRF and a wider beam.

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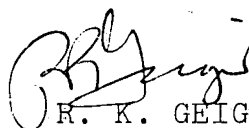
Subj: POPPY Technical Operations Group (TOG) Meeting;
Report of

fittings have to be checked. During the moving operations 20-25 site personnel can be effectively used.

f. Computer Procurement and Deployment

(1) PM-16/NSA - The first SEL 86 computer which is at HRB Singer and has completed its acceptance tests will be sent to [] with the new software package in September. The second SEL 86 computer will go to [] for acceptance testing and on line evaluation of the real time software; its ultimate deployment will then be to a field site, possibly [] in early 1973. The SEL 86 currently rented for HRB Singer for the ongoing real time software development effort, will either be rented or purchased to provide continuing ocean surveillance software maintenance and research.

2. The next TOG Meeting is scheduled for 6 July 1972 at 0930 in PM-16.


R. K. GEIGER

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CONTROL SYSTEMLIST OF ATTENDEESPM-16NSACIANRL

MR. MAYO
MR. HAMMARSTROM
MR. HELLRICH
MR. LAWTON

NSG

LT MORGAN
ENS KELLOG

SOCEnclosure (1) to
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1. 7107 Status (NRL)
2. 7107 Operational Highlights (NSG)
3. 7107 Processing (NSA)
4. Tasking at
5. Deployment Schedule (NSG/NRL)
6. Computer Procurement and Deployment (PM-16/NSA)

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