~~TOP SECRET~~

~~TOP SECRET - [illegible] VIA [illegible] - HANDLE VIA BYEMAN-TALENT-KEYHOLE JOINTLY~~

(When filled in) HANDLE VIA BYEMAN-TALENT-KEYHOLE CONTROL SYSTEMS JOINTLY

SPECIAL PROJECTS CONTROL NO. [illegible] NRL 0005.0-71

DATE: 19 Nov 1971

ORIGINATOR: [illegible] (78-15)

SERIAL NO.: BYE-[illegible]/2296-71

ENCLOSURES
(1) List of attendees
(2) TUG Agenda
(3) POPPY Operational Digest

DATE REC'D IN NRL	COPIES REC'D	COPY NOS.	RECEIPT NUMBER
[illegible] Nov 1971	One	1	7A 2206[illegible]

SUBJECT: POPPY Technical Operations Group (TUG) Meeting; Report of

D267-270

ROUTE TO	*	COPY NO.	WITH ENCLS.	SIGNATURE	DATE OUT	DATE RETURNED	ROUTE TO	*	COPY NO.	WITH ENCLS.	SIGNATURE	DATE OUT	DATE RETURNED
[illegible]				[signature]	12/1								
4000				[signature]									
7090				[signature]									
7900													
7920				[signature]									
7970													

Transferred 7-13-05 NRO Archives

RETURN THIS R[illegible] TO ROOM 222, BLDG. 43.
DO NOT ROUTE

* SYMBOL
A-ACTION
C-COMMENT
I-INFORMATION
R-RETAIN COPY
E-EVALUATION

NRL CONTROL R[illegible]

11/15/71 Tom Mg

DESTRUCTION REPORT NO. (when filled in)

HANDLE VIA BYEMAN-TALENT-KEYHOLE CONTROL SYSTEMS JOINTLY

FINISHED FILE

~~TOP SECRET~~ HANDLE VIA BYEMAN-TALENT-KEYHOLE CHANNELS JOINTLY

NRL SPECIAL PROJECTS CONTROL NO.
NRL BTK-000560-71

DATE
19 Nov 1971

~~TOP-SECRET~~ HANDLE VIA BYEMAN-TALENT-KEYHOLE CONTROL SYSTEMS JOINTLY
(When filled in)

SERIAL NO.
BYE-52296-71

ENCLOSURES
(1) List of Attendees
(2) TOG Agenda
(3) POPPY Operational Highlights

CNM (PM-16)

DATE REC'D IN NRL	COPIES REC'D	COPY NOS.	RECEIPT NUMBER
1 Dec 1971	One	#1	WA 22083

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

D267-270

ROUTE TO	*	COPY NO.	WITH ENCLS.	SIGNATURE	DATE OUT	DATE RETURNED	ROUTE TO	*	COPY NO.	WITH ENCLS.	SIGNATURE	DATE OUT	DATE RETURNED
1000					12/6								
4000													
7000													
7900													
7920													
7970													

RETURN THIS ROUTE SLIP TO NRL SPECIAL PROJECTS OFFICE, ROOM 222, BLDG. 43.
DO NOT ROUTE TO OTHER SECTION OR BRANCH.

* SYMBOL A-ACTION C-COMMENT I-INFORMATION R-RETAIN COPY E-EVALUATION	ACTION TAKEN BY	DESTRUCTION REPORT NO.	FINISHED FILE
	~~TOP-SECRET~~	HANDLE VIA BYEMAN-TALENT-KEYHOLE CONTROL SYSTEMS JOINTLY	

NRL CONTROL RECORD NDW-NRL-5216/1005 (11-67)

(When filled in)

~~TOP SECRET~~

CONTROL NO. BYE-52296/71 CY 1

REFERRED TO OFFICE	RECEIVED			RELEASED		SEEN BY	
	SIGNATURE	DATE	TIME	DATE	TIME	NAME & OFFICE SYMBOL	DATE
NRL							

(OVER)

Handle Via Indicated Controls

BYEMAN- TALENT -KEYHOLE

Access to this document will be restricted to those persons cleared for the specific projects;

EARPOP ....

....

WARNING

This document contains information affecting the national security of the United States within the meaning of the espionage laws U. S. Code Title 18, Sections 793 and 794. The law prohibits its transmission or the revelation of its contents in any manner to an unauthorized person, as well as its use in any manner prejudicial to the safety or interest of the United States or for the benefit of any foreign government to the detriment of the United States. It is to be seen only by personnel especially indoctrinated and authorized to receive information in the designated control channels. Its security must be maintained in accordance with regulations pertaining to BYEMAN-TALENT-KEYHOLE Control Systems.

NRL BTL-000560-~~TOP SECRET~~

GROUP 1
Excluded from automatic downgrading and declassification

~~SECRET~~ ~~EARP~~ HANDLE VIA BYEMAN-TALENT-KEYHOLE

DEPARTMENT OF THE NAVY
NAVY SPACE PROJECT OFFICE, PM-16
WASHINGTON, D.C. 20360

IN REPLY REFER TO
PM-16-41
19 Nov 1971

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

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

Encl: (1) List of Attendees
(2) TOG Agenda
(3) POPPY Operational Highlights

1. A TOG meeting was held at 0930, 15 November 1971 at the Naval Research Laboratory. The list of attendees and agenda are forwarded as enclosures (1) and (2).

a. 7105/6/7 Status

(1) Housekeeping conditions for Mission 7105/6 appear stable with no new problems encountered.

(2) NSG - Measurements at [redacted] indicate that, in high-density data collection conditions, Mission 7105 [redacted] are being seriously attenuated. This irregularity in 7105C in particular is causing much [redacted] data to be sorted by the A/DDS into the narrow bin and considerable narrow-bin data to be rejected entirely. All sites have been tasked to look at the problem further. NRL is reluctant to undertake major changes in the A/DDS gating or software sorting limits prior to the 7107 launch, but is inclined to defer to the judgment of the team of tech reps on site in [redacted] if suggested changes are easily implemented.

(3) The Mission 7107 A/B balls will be shipped to Vandenberg AFB on 22 November 1971. The C/D pair will be shipped 27 November 1971. NRL will send its launch team in two groups to the West Coast and at least one man will be sent to each of the sites for postlaunch monitoring and engineering evaluation of the payloads. Launch is now scheduled for Wednesday, 15 December, during the 1108 - 1301 Z window.

BYE-52296-71
Page 1 of 3
Copy 1 of 9

b. 7105/6 Operational Highlights

(1) See enclosure (3) for monthly highlights. The period was marked by very low-level activity among naval and high-interest land-based targets.

c. 7105/6 Processing Highlights

(1) NSA - NSA is very intent upon procuring an SEL810 for analysis of POPPY digital tapes using the software deployed to the field. Contracting is currently under way.

(2) NSA - selector devices for analog analysis are being shipped to the sites this month. Instruction manuals and appropriate site-compatible switching mechanisms are also being forwarded.

d. SEL810 Retention at

(1) The old SEL810 will be shipped to NRL for deployment to The new SEL810 at will be installed at In this manner all the sites will be configured with the same digital suit, while the old system will be located with access to complete maintenance. Digital training capability at will then be compatible with current field processing. The timeframe for completion of these moves will require action prior to 1 July 1972. The new SEL810 at will remain on site for at least 1 year.

(2) PM-16 - The contract for the SEL86 was let on 15 November 1971.

(3) NSG - NRL is no longer able to fund any training effort. NSG is currently planning to bring one key maintenance man and one key analyst from each site back to CONUS every year for a 2-week training and project symposium. NRL is working on maintenance training films for the program. This will improve maintenance and processing capability on the SEL810/86 system.

e. Engineering Tasking (Added at the Meeting)

(1) There were no changes to the engineering tasking for Mission 7107 as proposed by NRL. Tests of the variable thresholder and the roving modulator will be accomplished during the course of the engineering evaluation, which will run for at least 10 days subsequent to Mission 7107 launch. Tests for possible failure modes will be carried out during this period. A second phase of the testing will sample data quality, quantity and accuracy, as well as the PDE interface with 7107. Only after these tests have been satisfactorily completed will the satellites be turned over to national authority for operational tasking, approximately 1 February 1972.

(2) NSA - NSA needs digital and analog tapes as soon as practicable after launch to insure compatibility of collection data with its processing system. Especially desired are tapes of new bands or bands not previously deployed with [redacted] coverage. Appropriate tapes can be duplicated from the take at [redacted] to fulfill this latter need at NSA. Additionally, comb filter data tapes are required. For all tapes to be examined, NSA would like all four pulse widths on each channel tasked.

(3) NSA - If possible NSA would like to collect the 8-GHz beam of [redacted] while the satellites in the appropriate pair are less than [redacted] Also, [redacted] currently inactive, has previously come up several times on Christmas. Coverage by Mission 7107 is desired if possible.

(4) NRL - SLM tasking is being worked up. NRL would also like to conduct engineering tasking of Mission 7107 on a quarterly or semiannual basis for a period of 2 - 4 days. This could be accomplished on a rotating basis at each site.

(5) NSA - NSA desires an early look at the 7107 data from [redacted] and will confirm to NSG the compatibility of alpha-numeric task group names with its processing.

R. K. GEIGER
CAPT, USN
Director, Program C

LIST OF ATTENDEES

(15 Nov 71 TOG Meeting at NRL)

PM-16

[redacted]

NSA

[redacted]

NSG

LCDR Cole
LT Morgan
ENS Booth

NRL

Mr. Lorenzen
Mr. Mayo
Mr. Wilhelm
Mr. Eisenhauer

Enclosure (1)

TOG AGENDA

0930 15 NOV 1971

1. Status of 7105/6/7 (NRL)

2. POPPY operational reports on 7105/6 (NSG)

3. POPPY processing highlights (NSA)

4. SEL810 retention at [redacted] (PM-16)

BYE-52296-71
Copy 1 of 9

POPPY OPERATIONAL SUMMARY

26 Oct - 15 Nov 71

During the 3 weeks since 26 October, field site collection has remained light.

[redacted] has continued its search for signals of the possible [redacted] No target signals were detected.

No further intercept locations have been made of the [redacted] in the [redacted] reported its 94th intercept in support of Project FLAVOR in September.

On 4 - 5 November, [redacted] supported the collection effort of joint SAC/DIA/NSA reconnaissance flights against Soviet air defense zone structures. This was the second mission against the [redacted] On 10 preflight revs of 7105 A/B and C/D, [redacted] processed 110 locations of target signals, with only [redacted] emitters located within the [redacted] Six revs were tasked during the exercise, but darkness tasking constraints prevented tasking bands for geolocation of the [redacted] emitters were heard active in the [redacted] all geolocated at known EOB sites. During the first mission against this ADZ on 25 October, 47 target emitters were located, but only one [redacted] signal was located within the [redacted] at an EOB site on the northeast tip of [redacted]

[redacted] are collecting Signal Level Mode data against the [redacted] CHICOM emitter for elevation profile data. Four good quality tapes have been requested from each site.

The POPPY field sites have reported a total of 21 Soviet naval emitter locations during this reporting period, distributed within the following geographic areas:

Mediterranean	4
Black Sea	2
Baltic Sea	15
TOTAL	21

ENCLOSURE (3)

[redacted] have been tasked since August on a not-to-interfere basis to determine the current X-band environment and develop possible techniques for exploitation within Mission 7105 capabilities.

The data density was reported heavy by both [redacted] and [redacted] with the following analysis by [redacted]

Landbased:	Surface Search/Tracking	10%
	Fire Control (Mostly Soviet)	
Airborne:	Intercept (US)	15%
	Navigation (Soviet)	5%
Seaborne:	Navigation (Commercial/Military)	65%
	Fire Control/Tracking (US/Soviet)	5%

During the initial period of the special task, [redacted] terminated digital search for the [redacted] emitters because of excessive computer time. However, analog searching was successful with the 3371 PRF mode easily recognized.

[redacted] emitters radiating in the 1685, 1125 or 842 PRF modes. [redacted] has suggested using beam width criteria in isolating the [redacted] emitter ambiguity at 3371 PRF.

[redacted] experienced a computer outage on 25 October and to this date is still unable to perform digital processing. The disabling circuitry has been identified and new parts have been forwarded or are being procured. If all malfunctions have been identified, [redacted] should be operational within 5 - 10 days.

Recent intercepts of data from 7105 Charlie at [redacted] show that the [redacted] generated by the payload (Bravo channel) are narrower than nominal. This was initially discovered during routine searching for [redacted] family emitters where, in many cases, data were detected on the analog position, but were not isolated in digital analysis. [redacted] is currently collecting leading edge/trailing edge data as necessary to permit accurate digital measurement of [redacted]