SSA 6.21.94

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NRL reclass TOG minutes 2/24/72

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~~SECRET~~ EARPOP

~~SECR~~ FOR E [redacted] INTO TOG MINUTES OF 24 FEBR 1972

The matter of Mission 7107 sensitivity settings was a topic for discussion at the October Technical Operations Group (TOG) meeting at which strong objection to the NRL proposed settings for bands 3 and 4 was officially presented by NSA representatives. Specifically, the two proposals were:

MISSION 7107AB	NRL PROPOSAL	NSA PROPOSAL
Band 3	-56 dBm	-64 dBm
Band 4	-56 dBm	-48 dBm

It was NSA's desire to increase the sensitivity of band 3 to allow the collection of [redacted] signals (which cannot be intercepted at -56 dBm) and to decrease the sensitivity of band 4 to ensure that the powerful [redacted] emitter would not saturate the SLM receiving system. After considerable discussion, most of which concerned the band 4 setting, NRL agreed to accept both of NSA's proposals.

It is now noted that the following settings were made to subject bands:

MISSION 7107AB	SENSITIVITY
Band 3	-56 dBm
Band 4	-52 dBm

The results of not implementing the settings agreed on at the TOG meeting will have the following effects on POPPY collection:

1. The Mission 7107 will not be capable of intercepting the only technical signal of interest in the 500-815 MHz band [redacted] The signal has unsatisfied beam structure and power requirements.

2. The capability to measure UPPER beam characteristics of [redacted] may have been lost because of the possibility that saturation of the SLM system may occur at the higher elevation angles.

~~SECRET~~ EARPOP Handle via Byeman/Talent-Keyhole Control Systems Jointly

[redacted]

SECRET EARPOP

Reid — Pls give me a few minutes in Monday to discuss this subject. Jat

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SLM

std 53/2 55/2 57/2

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[redacted]

SECRET EARPOP

SECRET [redacted]

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

~~SECRET~~ [redacted] ~~SECRET EARPOP~~

FOR ENTRY INTO TOG MINUTES OF 24 FEBR 1972

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~~SECRET~~ EARPOP

~~SECRET~~ [redacted]

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

~~SECRET~~ [redacted]

MEMORANDUM

From: R. D. Mayo

To: [redacted]

Subj: Reclama on NSA entry into TOG Minutes of 24 February 1972

1. NRL remains willing to accept responsible guidance from recognized authority in generation of the concepts and detailed design goals of POPPY. There is a time in the POPPY development cycle when it will no longer be possible to make design changes or adjustments and still meet the launch schedule.

2. When a particular collection subsystem is required to fulfill both a general search as well as a technical intelligence collection role, it must be identified clearly in the concept formation stages of the effort so that dual-role designs can be implemented. When this is not done sufficiently early to allow for both designs to be implemented, then it must be determined clearly which of the two roles is most important so that the sensitivity adjustments can be made in a direction which will optimize one role or the other. These adjustments must be made only within the range that is considered safe and reliable for the operation of the collection subsystem.

3. NSA's objections to 7107 gain settings were made just three weeks prior to the shipment of the spacecraft to the launch site. In the case of Band 3 (550 to 815 MHz) for 7107A&B, NSA has now identified a technical intelligence role which requires a sensitivity 2 db higher than could safely and reliably be provided. In the case of Band 4 (815 to 970 MHz) in 7107A,B,C,&D, the late request to lower the sensitivity to preclude saturation from the highest elevated beam of [redacted] would have preempted the general search capability of this entire band.

4. NSA participation in the concept stages and detailed design stages was assured by the presence of [redacted] in the meetings with [redacted] and NRL on 20 and 25 February 1970. The request for sensitivity settings was made in a meeting with NSA, NRO, NRL, and NSG on 7 January 1971 where the main item of discussion was the assignment of W,X,Y, and Z pulse widths.

5. In summary, the guidance received did not have NRO blessing which would guarantee the mission emphasis of technical intelligence versus general search, and it was received too late to allow design implementation so both roles could be used safely. It is felt that the dialog in this area must start early and go through several examinations to preclude such discontinuities in the future.

SECRET [redacted]