

~~Top Secret~~
NOTES TOWARD THE BRIEFING FOR NSA, NRO, NSG, @ BASEMENT OF PENTAGON 21 NOV.

Introduction by Capt Geiger with comments relative to Dr. NAKA's wishes regarding the future exploitation of the data in support of the communities needs for EOB.theater, through adjustments of processing and tasking.

Note the degree of perishability or lack of ^{it for} this type of data.

Spectrum ~~of~~ priority order

Statement of the variety (by frequency band) of emitters which have been located in the limited processing capability of [redacted] Note that the spectrum density is quite different between these two sites so that the majority of X-Band locations are historically made at [redacted] It is also pointed out that the fact that an emitter is capable of being located by the Computer Aided Manual Analysis (CAMA) procedures of these two sites does not necessarily indicate that these emitters will respond ~~to~~ efficiently to the Batch Processing of NSA. On the other hand the Batch Processing of NSA today does not necessarily have to be so restrained ~~to~~ that NO EOB data can be effectively produced. [redacted] are not so overpoweringly important that they should remain the sum and total of NSA's EOB product from POPPY. . . By examining the software restraints in data/^{NSA's} sorting and selection one ~~should~~ easily ^{be able to} say why these two emitter families are the only ones which qualify.

Historically the software of NSA ~~was~~ evolved as POPPY has grown, so that there is not necessarily a good match today. In 1965 when [redacted] was born the birds flew [redacted] and the observation accuracy was such that a lot of averaging had to be done to obtain values of PRF (PRI) and Antenna Scan rate etc which would allow for good location accuracy. However the POPPY situation of today sees the Birds quite close and the observational accuracy improved vastly to sustain the same location accuracy which was experienced with the longer base-line (Separation). The main aspect which has changed is the number of opportunities per unit of data-time which will respond to location analysis. In 1965 a good pass was one when two [redacted] emitters were up, long enough that they both could be located. Conversely, today in one Pass there are ^{as many as} ~~about~~ 15 to 20 [redacted] emitters located by [redacted]

The technical aspects of [redacted] and NSA's processing will undergo a significant technical exchange in the near future.

**Handle Via BYEMAN
Control System only**

~~TOP SECRET~~

ASSUMPTION # I: NSA can be persuaded to process more than the two emitter families of EOB data...the pressures can be brought to bear in this direction by Community need for EOB data in general and through the NRO Funding route. DIA probably can state clearly the needs for EOB data and the resources through which the data needs have recently been satisfied and why the emphasis at this time.

ASSUMPTION # II: NSA Will not or Can Not provide any additional EOB output in the period from now until March when other EOB resources are available...

In the face of this situation then [] might at the expense of some of their other SOI location capability be given an EMITTER FAMILY to exploit for a given period of time...Under this procedure the site would need tasking relief (Support) to assure that adequate data variety was collected to support the study. It is anticipated that under such a specific effort that all the variants as well as the disposition of the emitters could result. In time it is expected that the association of UNKNOWNs with the various weapon systems would in- time, be made. This is in direct agreement with the USIB doctrine to draw these associations so that ^{change in} the weapon system capability which would result by the new emitter could be more easily made. One must be especially clever in the priority order for the ~~the~~ selection of the specific Emitter families so that the most important ones are made

Handle Via BYE NAN
control system only

~~Top Secret~~

~~Top Secret~~

CONSIDERATIONS relative to the participation in the "EOB assessment" meeting in Pentagon on Friday 21 November.

1. The agenda provides ample opportunity for both NSA and NRL to outline the potential for EOB Exploitation of the data from Mission 7106 & 7105. It is assumed that NSA will resist pressures of the community toward the processing efforts directed toward EOB since their only demonstration of significance in our data has been with only two emitter families, [REDACTED]....it is believed that this lack of emitter variety is caused by the heavy restraints in the software ~~xxxx~~ sprt criteria imposed by the original software of 1963-1964 when only emitters which persist for at least 100 seconds can be located due to the heavy demand for Averaging of the large number of pulses which this long period would provide. It is not evident to NRL just how much work it would be to relax the sort criteria so that other emitters would become locatable. As we understand it, the Machine Processing effort at NSA will automatically treat only the emitters which scan 360° in azimuth and have a RRF between ____ and ____ Pulses per second.

At the Program Review Meeting during August NSA reported that in one 24 hour analysis period over 2000 emitters were located by their Machine Processing but that only about 1500 have been Reported Out in about 1 year. The difference between one days worth of locations and one years worth is obscure to us....HOW CAN NSA BE MOTIVATED TO DO THIS JOB???

The source of their funds are the NRO I suspect, this might be a fulcrume.

Handle Via BYEMAN
control system only

~~Top Secret~~

NNNNTISCC289
PP RUXQAAJ RUXQAAL
DE RUXQAA 674 3250055
ZNY XXXXX VVV
P 210053Z
BT
XXXXX

960 CONQUER 476

Handle via SYLHAI
Control System

~~SECRET~~

ACTION

9 AM

To R 0820
11-23-70
5614
5170

~~SECRET~~ 202150Z NOV 70 CITE MARGO 0916.

PRIORITY PROBE INFO PRIORITY [] CONQUER, WAHOO, WHIG

EARPOP

SUBJ: MISSION 7107 TECHNICAL DOCUMENTATION REQUEST

1. EXTENSIVE AND SUCCESSFUL EFFORTS TO ANALYZE MISSION 7106 SLX DATA HAVE REVEALED THE NECESSITY OF ACCURATE, PRE-FLIGHT, 3-DIMENSIONAL RECEIVER SYSTEM CALIBRATION PATTERNS TO REFINE SLX DATA AND THEREBY ENHANCE THE TECHNICAL INTELLIGENCE CAPABILITY. IT IS THEREFORE REQUESTED THAT NRL PROVIDE, FOR MISSION 7107, 3-DIMENSIONAL SYSTEM RECEIVING PATTERNS FOR SEVERAL RF BANDS OF HIGH PRIORITY.

2. THE SPECIFICS FOR THIS DOCUMENTATION SHOULD BE AGREED UPON BY NRL AND NSA AND A MEETING ON 24 NOVEMBER 1970 AT NRL IS SUGGESTED TO INITIATE DISCUSSIONS.

~~SECRET~~

BT

Handle via SYLHAI
Control System

~~SECRET~~

0948

RR RUXQAAJ

DE RUXQAA 084 3071735

ZNY XXXXX VVV

R 031734Z

BT

XXXXX

CHARGE 001, 789

CATOR PASS CHARGE

~~SECRET~~~~SECRET~~ 031733Z NOV 70 CITE WHIG 0988

CHARGE, PROBE INFO

BYEMAN ~~EAPOP~~

FOR ADM HARLFINGER AND GENERAL KING FROM DR. NAKA

SUBJ: POPPY 7107 R&D SPACECRAFT

REF: A. 26 OCT 70 PROGRAM C PRESENTATION ON 7107 R&D SPACECRAFT

B. WHIG 0358

C. CHARGE 4466

D. WHIG 0696

THIS MESSAGE IN TWO PARTS. PART I FOR PROBE.

DUE TO LAUNCH SLIP AND COST (REF A) THE REQUIREMENT (REF B)
FOR A POPPY 7107 R&D SPACECRAFT IS DELETED. THE R&D SPACECRAFT
CAN BE CONSIDERED FOR A FUTURE LAUNCH.

PART II FOR CHARGE.

1. THE REQUIREMENT TO PROVIDE AFT RACK SPACE ON 2707 POPPY

TOR 1300
11-3-70

5614
5600
4000
1000

Please
Comment

5170 PGW
5604 Saan
11/3
5006 Br 11/3

PAGE TWO ~~SECRET~~ WHIG 0988

AGENA FOR THE POPPY 7107 R&D SPACECRAFT IS DELETED.

2. THE REQUIREMENT FOR 2707 POPPY AGENA TO PROVIDE BACK-UP
CAPABILITY FOR 4427 IS ALSO DELETED (REF C).3. REQUEST YOUR RECOMMENDATION FOR THE USE OF THE AFT RACK
SPACE (E.G., STOP THE DUAL CONFIGURING OF 4427, MABELI- REF D-
AND USE 2707 POPPY AS A BACK-UP LAUNCH VEHICLE).~~SECRET~~

BT

NRL INCOMING DOCUMENT



B1300-92



1



MESSAGE

~~SECRET~~

NNNN

INT QSL PLS

NOV 11 1970
NRL

~~TOP SECRET~~

0930 mtg N/C

18 Nov. '70

Space Organization

No official word yet.

OP-76

Reg. C to CMM by 5 Jan

_____ Lake may be _____

NSA organization change

1) OGA Status (no batt cap evident)

being left on for fear can't turn back on.

4 Pulse widths on Cx-mtr

Batt Temp too high

Should we ship 2nd 810A to _____?

(a) OS spacing improving, (b) can spend more time on board,

(c) Would help transition (less down time if 2nd 810A were there), NSA objects - says not worth cost, Discussion ends. Recommend deploy.

Pres. sched. not till Feb. Ship sooner! 2. Apr.?

2) Computer selection on schedule.

3) PDE mtg held, plan available now.

Will be compatible with advanced PDE.

~~TOP SECRET~~

HANDLE VIA
BYEMAN

CONTROL SYSTEMS

not met. mess. Tolent-Keyhole jointly

mtg. Dec 13th 0930 N/C

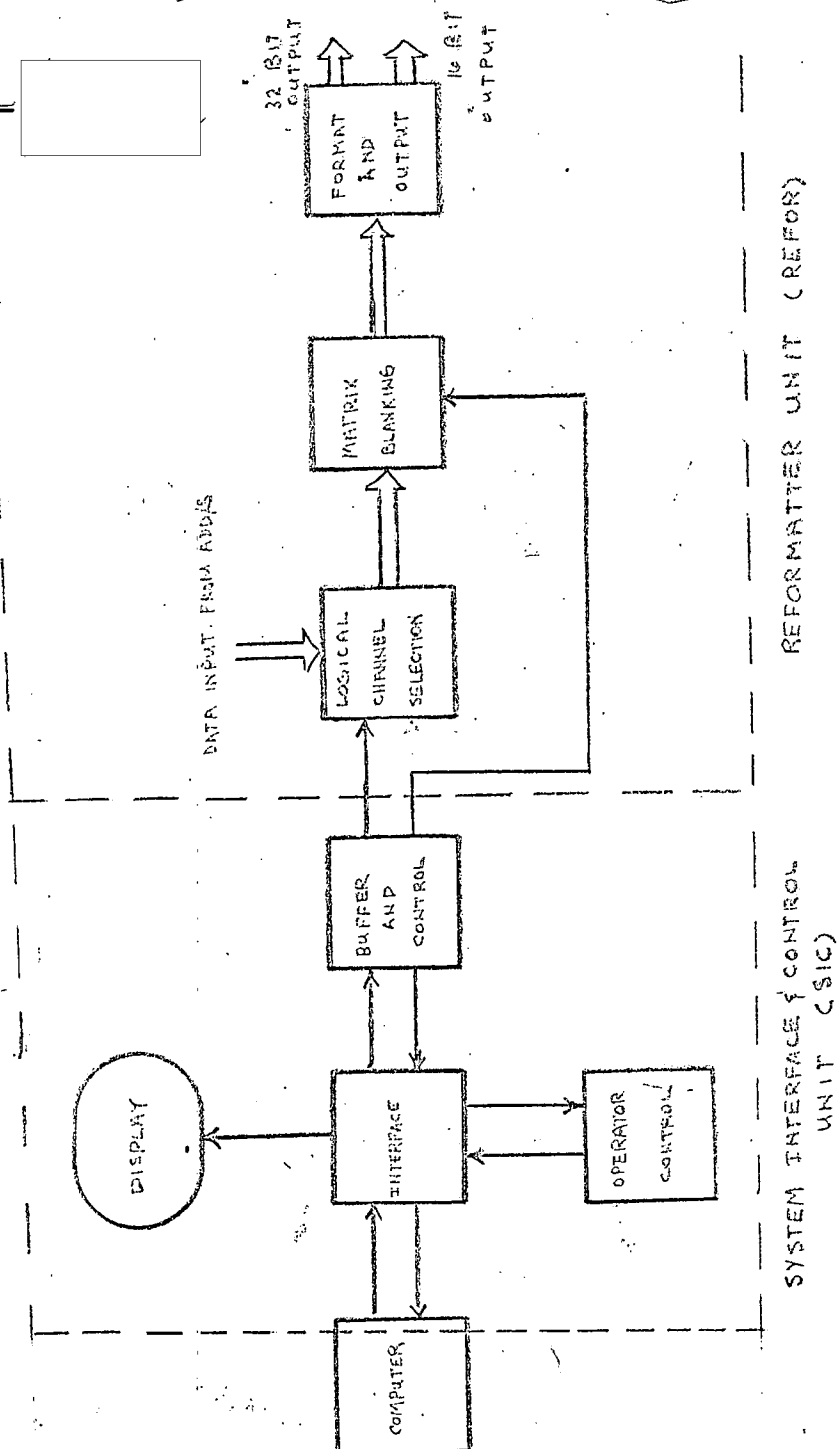


FIG. 3 BLOCK DIAG. OF PDE

Handle via
BYEMAN/TK/Comint
control system
only

~~Top Secret~~

OCT NOV DEC JAN FEB MAR APR

System Design

Parts on order

Bread Board (REFOR)

Bread Board (SIC)

PDE Prototype complete

Evaluate prototype PDE

Build Unit #1

Deploy #1 to

ADD/S modification @ complete

ADD/S modification @ complete

BTC Mod to SEL 810A complete
forBTC Mod to SEL 810A complete
for

BTC Mod to SEL 810A for

FIGURE 4
SCHEDULE

Handle Via
BUCHAN/TK/Comint
Control system
only jointly

~~Top Secret~~