

~~SECRET~~ ~~EARPOP~~ BYEMAN

HANDLE VIA BYEMAN

CONTROL SYSTEM

15 May 1970

B402Z

RF: 2100-2300 MHZ

~~PROJECT~~ ~~EARPOP~~

PRF: 80-90 PPPS, Stable with doublets spaced approx 195 USEC

PRI: 11111-12500 USEC

SCAN: Irregular. Five-on, five-off pulsing causes an apparent complex scan of 8.0-9.0 HZ, one-tenth the PRF.

BW: UNK

Notes: Function is missile acquisition at ABM sites. First intercept and location from [REDACTED]. Intercept from POPPY extremely rare due to limited deployment and to the fact that the emitter will be working within a narrow sector corresponding to its target.

[REDACTED]  
ADDS CHANNELS: 07/06 13/12

1. ATCON against the master digital recording on appropriate channels.
2. PRI SORT for variant limits against ATCON on MT from 10526 to 13333 USEC.
3. REJECT SORT against PRI SORT on MT from 5263 to 6667 USEC. Retain the REJECT SORT.
4. DNTAC against the REJECT SORT with 15 USEC error, minimum PRI of 10526, maximum PRI of 13333 USEC, 2 intervals to establish a burst and a maximum of 2 pulses dropped.
5. 1I against the DNTAC to properly sequence the data. BSTRAN PRI sort against the reciprocal of the analog analysis PRF plus and minus 25 USEC. [REDACTED] intercept should also be processed through DELTAC for tight parameters if the mission is already being processed for a location candidate.
6. DELTAC against the BSTRAN with SS#2 set and 1.0 second scan. Most bursts will be developed from POPPY triggering on the second pulse in the [REDACTED] doublet; however, occasional phase shifts of about 200 USEC in the WTT shift column will indicate that POPPY triggered on the first doublet for one or more bursts. These bursts should be rejected with the BSTRAN line reject option followed by a second DELTAC run.
7. HRBLOC against the DELTAC output. Zero any inputs derived from less than five pulses per burst if remaining data is sufficient to develop a reliable location.
8. PRI SORT against the REJECT SORT using the DELTAC average PRI plus and minus 15 USEC.
9. PICAP SPECIAL from 150 USEC against the PRI SORT. This will provide distribution for averaging the interval between pulse doublets, if intercepted.
10. It is not possible to distinguish the correct [REDACTED] by any means other than incompatible image. Deployed sites are Sary Shagan and Moscow areas.

~~SECRET~~

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CONTROL SYSTEM


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~~SECRET~~~~SECRET EARPOR BYEMAN~~~~CHANNELS~~~~HANDLE VIA BYEMAN~~

E-54750-70

☐ Continued~~CONTROL SYSTEM~~~~PROJECT EARPOR~~

11. Writeup package should include PICAP, DELTAC and HRBLOC output sheets. If the location is not considered reliable, then run a series of locations with various inputs weighted zero. Plot the resulting locations, connect the points and report a line of position, or report the bearing of the LOP with reference to the impact point reported.
12. In the comments section of the location report provide the parameters of any additional ☐ emitters with different parameters which were active during the same mission.

  
R. L. POTTS  
LT USN

~~SECRET~~~~HANDLE VIA BYEMAN~~~~CONTROL SYSTEM~~~~PROJECT EARPOR~~~~SECRET EARPOR BYEMAN CHANNELS~~

4 OF 5

TWX235  
RF RUKQAAJ  
DE RUKQAA 965 138160Z  
ZNY XXXXX VVV  
R 181600Z  
BT  
XXXXX

~~TOP SECRET~~

Handle via BYEMAN  
Control System

~~TOP SECRET~~ 131659Z MAY 1970 CITE CONQUER 388  
ROUTINE Wahoo, MARGO INFO ROUTINE [ ] PROBE  
~~EARTOP~~

1. INCREASED SEPARATION 7105C/D PAYLOADS (CURRENTLY APPROX-  
IMATELY 500 NM) HAS SEVERLY LIMITED OPPORTUNITIES TO APPLY  
FIELD GEOLOCATING PROCESSING TECHNIQUES TO MAJORITY INTER-  
CEPTED SIGNALS. OF SIGNALS CURRENTLY ON PROCESSING PRIORITY LIST  
FOR [ ] ONLY THE [ ] EMITTER CAN STILL BE EFFECT-  
IVELY PROCESSED DUE TO ITS STABLE PULSE RATE AND RELATIVELY WIDE  
BEAM WIDTHS. 7105C/D SPACING IS CONTINUING TO INCREASE AT RATE  
APPROXIMATELY 10 NM PER DAY.

2. IN VIEW ABOVE, RECOMMEND CONSIDER INCLUDING [ ] TASK-  
ING ON ALL 7105C/D ORBITS OVER [ ] IN ORDER MAXIMIZE COLLECTION  
OF PROCESSABLE DATA. ESTIMATE [ ] EMITTER INTERCEPTS WILL BE  
UNPROCESSABLE DUE TO LACK OVERLAPPING ILLUMINATION WITHIN NEXT TWO  
WEEKS IF CURRENT ACCELERATIONS PAYLOAD 7105C/D CONTINUE.

~~TOP SECRET~~  
BT

~~TOP SECRET~~

Handle via BYEMAN  
Control System

~~TOP SECRET~~

950

CONTROL NO. \_\_\_\_\_

REFERRED TO OFFICE	RECEIVED			RELEASED		SEEN BY	
	SIGNATURE	DATE	TIME	DATE	TIME	NAME & OFFICE SYMBOL	DATE
Cap [redacted]							
1030 RDM Same for [redacted]							

Handle Via Indicated Controls  
**BYEMAN**

[redacted] 5614

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

FARPOF .....  
.....

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NRL 22-70

~~TOP SECRET~~

NOT SIGNED FOR  
from NIC 24

GROUP 1  
Excluded from automatic  
downgrading and declassification

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NRO "Call" for [redacted] Development of [redacted] 7/1.  
using TITAN III B boosters etc.

~~Top Secret~~ [redacted]

[redacted]  
from  
(BYE 55445-92)

[Mid May 1970]

~~Top Secret~~ [redacted]

Handle via BYEMAN  
control system only

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NNNNWX177  
RR RUXQAAJ  
DE RUXQAA 834 1331600  
ZNY XXXXX VVV  
R 131557Z  
BT  
XXXXXX  
[REDACTED]

~~TOP-SECRET~~  
Handle via BYEMAN  
Control System

R 130100Z  
FM [REDACTED]  
TO COMNAVSECGRU  
[REDACTED]

CNO  
COMNAVINTCOM  
DIRNSA  
YSNKQAC/SAFSS (FOR SOC)  
ZEM

~~TOP SECRET~~ B3B3B BYEMAN ~~EARTOP~~ CHANNELS

DIRNSA FOR K4

SOC FOR [REDACTED]

CNO HOLD AND PASS TO NRL  
710SA REGENERATIVE BAND 11

A. YOUR 011922Z MAY 70

1. EVALUATION AS OUTLINED REF A CONDUCTED WITH THE FOLLOWING RESULTS.

A. ALL GROUPS WITH DL 11 ACTIVATED IN ~~VERTICAL~~ <sup>HORIZONTAL</sup> POLARIZATION OPTION HAD NO REGENERATIONS DURING PASSES. DATA DENSITY WAS LIGHT BUT GOOD.

B. ALL GROUPS WITH DL 11 ACTIVATED IN ~~HORIZONTAL~~ <sup>VERTICAL</sup> POLARIZATION OPTION WERE REGENERATIVE THRU APPROXIMATELY 90 PERCENT OF EACH PASS. ON ORBITS 3080 AND 3093, TASKED GROUPS WOULD NOT TAKE ON THE INITIAL INTERROGATION. SECOND INTERROGATION ATTEMPTS WERE SUCCESSFUL WITH REGENERATION NOTED ALMOST IMMEDIATELY.

2. RESUMED NORMAL OPERATIONS 122359Z MAY 70.

175

~~TOP-SECRET~~

Handle via BYEMAN  
Control System

B1291-92

NNNNTWX180  
RR RUXQAA  
DE RUXQAA 849 1332100  
ZNY XXXXX VVV  
R 132100Z  
BT  
XXXXX  
[REDACTED]

~~SECRET~~

Handle via BYEMAN  
Control System

R 130643Z  
[REDACTED]

TO COMNAVSECGRU  
INFO CNO  
COMNAVINTCOM  
DIRNSA  
ZEM

~~SECRET~~ 3B5BB EARTOP/BYEMAN CHANNELS  
CNO HOLD AND PASS TO NRL  
DIRNSA FOR K4

COMNAVSECGRU 011922Z MAY 70

7106 ALFA REGECLRAIIVE BAND 11

1. TESTS ON 7106 ALFA BAND 11 WERE CONDUCTED THIS STATION IN  
ACCORDANCE WITH REF. THE FOLLOWING ARE THE RESULTS OF THESE TESTS:

A. 050001Z-082559Z DURING THIS PERIOD SEVEN ORBITS WERE ACTIVATED  
WITH DL "A" SELECT ONLY. REGENERATION WAS NOT NOTED AT ANYTIME  
DURING THESE SEVEN ORBITS AND DATA DENSITY 33.33 NORMAL. ORBIT  
3036 ON 06 MAY 1970 SHOULD BE CONSIDERED INVALID FOR TEST PURPOSES  
AS IT WAS ACTIVATED WITH A AND B SELECT.

B. 090001Z-122359Z MAY: DURING THIS PERIOD SEVEN ORBITS WERE  
ACTIVATED WITH DL "B" SELECT ONLY. DURING THESE SEVEN ORBITS HEAVY  
REGEN NOISE WAS NOTED WHENEVER DL "B" SELECT WAS ACTIVATED. RESETS  
AND REACTIVATIONS WERE OF NO AVAIL AS THE REGEN WAS EVER PRESENT.

2. THE CONCLUSION CAN BE REACHED THAT DL 11 SHOULD BE TASKED IN  
THE ALFA OPTION ONLY.

240

*seemed*

1028

5-14-70

5614

~~SECRET~~

Handle via BYEMAN  
Control System

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NNNNWX190  
P P RUXGAAJ  
DE RUXGAA 874 1341049  
ZNY XXXXX VVV  
P 141048Z  
BT  
XXXXX

~~TOP SECRET~~  
Handle via BYEM  
Control System

10 40

5-14-70

5614

5170

P 131636Z ZYS  
FM COMNAVINTCOM  
TO CINCLANTFLT  
COMNAVSECGRU  
INFO ZEN/CNO  
CINCUSNAVEUR  
YDHDDRC/USCOM/EASTLANT  
COMSIXTHFLT  
ZEN/NRL  
ZEN

~~TOP SECRET~~ BBBBBB ~~TOP SECRET~~ BYEMAN CONTROL SYSTEM

SPECIAL SHIPBORNE LOCATION REPORTS LANT

A. CINCLANTFLT 082041Z MAY 70

1. USIB HAS APPROVED POPPY SUPPORT TO REQUIREMENT EXPRESSED

REF A. AUTHORITY RECEIVED PERMITS TASKING OF PRESENTLY

UNTASKED ORBITS OVER NORTH ATLANTIC AND PERMITS [ ] TO

[ ] EMANATING FROM CHG Leningrad

IMMEDIATELY AFTER PROCESSING UNIDENTIFIED SIGNALS [ ]

DURATION OF SUPPORT NOT SPECIFIED, AND WILL CONTINUE UNTIL  
Leningrad INTERCEPTED BY LANTFLT SURVEILLANCE UNITS, OR UNTIL  
REQUIREMENT IS OTHERWISE TERMINATED.

2. FOR COMNAVSECGRU. REQUEST TAKE NECESSARY ACTION TO IMPLEMENT  
SUPPORT AUTHORIZED. PROCEDURES FOR SPOT REPORTING REMAIN  
UNCHANGED.

180

~~TOP SECRET~~  
Handle via BYEM  
Control System

NNNNNTWX186  
RR RUXCAAJ  
DE RUXGAA 868 1341020  
ZNY XXXXX VVV  
R 141019Z  
BT  
XXXXX

~~TOP SECRET~~

Handle via BYEMAN  
Control System

1052  
5-14-70

5614

5170

P R 131928Z  
FM COMNAVSECGRU

INFO CNO  
COMNAVINTCOM  
CINCUSNAVEUR  
CINCLANTFLT  
COMSIXTHFLT  
USCOMEASTLANT  
DIRNSA  
YSNKQAC/SAFSS(SOC)  
NFOIO  
ZEM

~~TOP SECRET~~ 00335 CANFOR BYEMAN CHANNELS

CNO HOLD AND PASS TO NRL

DIRNSA FOR K4

SOC FOR

SPECIAL REPORT REQUIREMENT (U)

A. CINCLANTFLT 082041Z MAY 70 NOTAL

1. REF A REQUESTED CONTINUATION RECENT POPPY OCEAN  
SURVEILLANCE COVERAGE AND GEOLOCATION REPORTING FOR  
INTERCEPTS CHG LENINGRAD EMITTERS ONLY. THIS REQUEST,  
BASED ON ASSUMPTION LENINGRAD WILL RETURN TO MED/BLACK  
SEA VIA ATLANTIC, APPROVED BY (SORS) WITH IMMED  
EFFECT. EFFORT WILL BE TERMINATED WHEN LENINGRAD IS  
CONTACTED BY SURVEILLANCE UNITS OF LANFLT.

2. COMMENCING UPON RECEIPT, PROCESS  
INTERCEPTS IN SECOND PRIORITY AFTER  
AND REPORT AT IMMEDIATE PRECEDENCE IN TANGO/KILO CHANNELS  
TO CINCLANTFLT AND CINCUSNAVEUR, INFO/PRIORITY TO CNO,  
COMNAVINTCOM, COMNAVSECGRU, COMSIXTHFLT, NFOIO AND  
INCLUDE PASSING INSTRUCTIONS "CINCUSNAVEUR HOLD AND PASS  
TO USCOMEASTLANT" AND REPORT  
IN FOL FORMAT:

SPECIAL SHIPBORNE LOCATION REPORT - CHG LENINGRAD

1. INTERCEPT TIME
2. EMITTER NAME
3. LOCATION AND LOCATION QUALITY RATING (EXCELLENT, GOOD,  
FAIR, POOR)

CONTINUE TO REPORT ALL SHIPBORNE LOCATIONS USING EXISTING  
FORMAT IN THE SUPPLEMENTARY LOCATION REPORT.

3. AUTH GRANTED UTILIZE UNTASKED ORBITS BETWEEN 150-170  
DEGREES EQX FOR SUPPORT ABOVE SPECIAL REPORTING REQUIREMENT  
USING 7105/7106 TASK GROUPS 33/34 AND R02 RESPECTFULLY.

4. MOST RECENT NFOIO ANALYSIS INDICATES LENINGRAD STILL  
IN NORFLT AREA, POSS IN-PORT.

600

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Control System