

(9-2)

Allen

1965 OCT 5 10

SAFSS 563

FTC966/052306Z

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~~SECRET~~ 052242Z

WHIG CITE [] 8986

EARPOP

FOR STEWART FROM MARTIN

1. REFERENCE YOUR WHIG 2446 AND MISSION 7158 EXPERIENCE THAT HIGHLIGHTS THE DESIRABILITY OF AN ANALOG RECORDER TO ASSIST IN DE-INTERLEAVING THE DIGITAL PRODUCT OF PROGRAM 770. IN RESPONSE TO OUR RECENT REQUEST THE CONTRACTOR HAS PROPOSED A NARROW BAND ANALOG RECORDER INSTALLATION IN MISSION 7160 PAYLOAD AS FOLLOWS:

A. A TWO-TRACK LEACH RECORDER WITH A FOUR TO ONE (25 KC TO 100 KC) READ-IN/READ-OUT RATIO, PROVIDING 24 MINUTES READ-IN CAPACITY. PAYLOAD ACCEPT PULSES WOULD BE STRETCHED AND FED TO ONE TRACK; THE THREE-LEVEL RZ DATA WORD WOULD BE FED TO THE SECOND TRACK.

B. MODIFICATION OF PAYLOAD CIRCUITRY TO EFFECT PULSE STRETCHING.

C. TWO ADDITIONAL VHF TRANSMITTERS TO HANDLE THE TWO RECORDER TRACKS, AN ADDITIONAL DIPLEXER, AND AN ADDITIONAL ANTENNA.

D. A NEW VEHICLE "J"-BOX TO CONTROL AND MONITOR THE RECORDER.

2. THE ESTIMATED IMPACT OF THE CHANGE ON THE 7160 LAUNCH DATE IS APPROXIMATELY SIX WEEKS OR LAUNCH BY 1 FEB 1966. INVOLVED IS:

A. DESIGN, BREADBOARD, FABRICATION AND QUALIFICATION OF THE J-BOX.

B. DESIGN, INSTALLATION OF PAYLOAD CIRCUITRY.

C. INSTALLATION DESIGN FOR ALL HARDWARE.

D. MOCKUP OF VEHICLE INSTALLATION AND WIRING.

E. PROCUREMENT OF TRANSMITTERS, DIPLEXER, AND ANTENNA WITH A LEAD TIME OF SIX WEEKS.

3. BECAUSE OF THE DIFFERENCE BETWEEN THE LEACH CAPACITY OF 24 MINUTES AND THE PAYLOAD-ON TIME, WHICH CAN BE 60 MINUTES OR MORE BETWEEN SOME READ-OUT PASSES, WE COULD RETRIEVE LEACH RECORDINGS TO CORRELATE WITH ONLY ABOUT 40 PERCENT OF THE TOTAL DIGITAL PAYLOAD OUTPUT. IT IS OUR UNDERSTANDING THAT SUCH CORRELATION MUST AT PRESENT BE DONE MANUALLY BY THE PROCESSOR AND THAT THE CORRELATION EFFORT FOR MISSION 7160 HAS BARELY BEGUN.

4. WE WILL CONTINUE TO SCRUB DOWN THE ENGINEERING, TESTS, AND PROJECTED SCHEDULE IMPACTS ASSOCIATED WITH THE CHANGE. I AM CONVINCED THAT WE SHOULD ADD THE RECORDER ON MISSION 7160 IF IT CAN BE DONE WITH OUT SERIOUS SLIPPAGE OF THIS FLIGHT (SAY-BEYOND 1 FEB) OR IMPACT UPON THE FIRST MULTI-CROUP FLIGHT.

5. REQUEST YOUR COMMENTS.

~~SECRET~~

THIS 0906 EARPOP WILL RE-RUN ON REQUEST

Copy 26 of 26 Pages
Page 1 of 26 Pages

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910 05 002

SECURITY CLASSIFICATION

~~SECRET~~ BYEMAN

TYPE MSG	BOOK MULTIPLE SINGLE
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PRECEDENCE

ACTION	ROUTINE
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INFO

DTG

FROM: **WHIG 0440**

TO:

REF 8006

AGREE MUST ADD ANALOG ON MISSION 7160 FOR ASSISTING DEINTERLEAVING. REQUEST MINIMUM SCHEDULE IMPACT WITH LAUNCH PRIOR TO 1 FEB IF POSSIBLE. REMOVE STOPPER IF NECESSARY. PLEASE ADVISE NEW SCHEDULE AND NOTIFY 6426.

SPECIAL INSTRUCTIONS

1. Comm 50X1
2. SS-2
3. SS-6
4. RPW1
5. RPW2

7160

DATE	TIME
8	1800
MONTH	YEAR
Oct	1966
PAGE NO.	NO. OF PAGES
1	1

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			TYPED (or STAMPED) NAME AND TITLE
			50X1

SECURITY CLASSIFICATION	REGRADING INSTRUCTIONS
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DD FORM 173

REPLACES EDITION OF 1 MAY 66 WHICH MAY BE USED.

2 GPO 1966-701-226

510 OF 003

PRIORITY

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Handle via BYEMAN
Control System

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File 7160

5722

OCT 8 1953

SAFSS

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FTB354/080030Z ZPO

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FIVE TWO SIX THREE ZERO TWO ONE EIGHT ONE

~~TOP SECRET~~ 072340Z

PRIORITY WHIC INFO CITE 6426

REINDEER-X

REF. MSN 7160/7228

1. REINDEER-17 FORMAT IS SIMILAR TO THAT ON PREVIOUS 715X

MISSIONS:

CARD COLUMN

FUNCTION

1 - 3

REV NUMBER (E.G. 058)

5 - 8

LONGITUDE OF ASCENDING NODE (E.G. 040W)

#11

CARD NUMBER FOR ORBIT (IF SEVERAL CARDS ARE REQUIRED FOR ONE ORBIT, THIS COLUMN IS USED FOR A SEQUENCE NUMBER IN EACH, STARTING WITH ONE (1) FOR THE FIRST (OR ONLY) CARD FOR EVERY ORBIT.)

18 - 21

7160 ON LATITUDE (E.G., 09NA OR 10SD WHERE A IS ASCENDING AND D IS DESCENDING WITH REFERENCE TO THE NORTH POLE.)

23 - 26

7160 OFF LATITUDE

43 - 46

7228 ON LATITUDE

48 - 51

7228 OFF LATITUDE

53 - 56

STOPPER ON LATITUDE

58 - 61

STOPPER OFF LATITUDE

63 - 66

ANALOG RECORDER ON LATITUDE

68 - 71

ANALOG RECORDER OFF LATITUDE

73 - 76

SUBSEQUENT ORBIT MONITORS PUNCH A "ONE" IF OFF LATITUDE OCCURS ON ORBIT SUBSEQUENT TO THE ONE SHOWN ON CARD

SAFSS-4	ACTION	INFO
DIRECTOR		
DEPUTY		
CHIEF		
CLERK		
ENGINEER		
TELETYPE		
RECORD		
COMM		
ADMIN		

COLUMN 73 7160

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Control System

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Control System

COLUMN 74 7228
COLUMN 75 STOPPER
COLUMN 76 ANALOG RECORDER

77 - 80 CARD SEQUENCE NUMBER

#AT LEAST ONE OR THE OTHER (COLUMN 77 OR COLUMNS 77-80) MUST SHOW CORRECT CARD SEQUENCE FOR EACH ORBIT.

BURST NUMBERS FOR EACH PAYLOAD ARE ASSIGNED IN THE ORDER IN WHICH CARDS APPEAR IN THE INPUT DECK. CARDS OUT OF SEQUENCE ON ANY GIVEN ORBIT WILL BE PROGRAMMED CORRECTLY, BUT THE BURST NUMBERS WILL BE REVERSED RELATIVE TO THE SEQUENCE OF EVENTS.

- 2. CRITERIA FOR PROGRAMMING ANALOG RECORDER:
 - A. R/I TIME 24 MIN., R/O TIME 6 MIN.
 - B. MINIMUM READIN BURST 30 SECONDS.
 - C. READOUT WILL BE POSSIBLE AT STATION CONTACTS WHERE DURATION ABOVE FIVE DEG. ELEV. IS GREATER THAN 360 SECONDS. ENTIRE TAPE WILL BE READOUT AT EACH OF THESE READOUTS.
 - D. THE MAIN 7160 PAYLOAD MUST BE PROGRAMMED ON WHENEVER THE ANALOG TAPE RECORDER IS ON.

3. REQUIRE REINDEER-17 MLT 8 NOV 65.

4. REQUEST MISSION NUMBER ASSIGNMENT FOR THE "STOPPER" PAYLOAD.

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CFN: 6426 REINDEER-X WILL RERUN UPON REQUEST
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SIX NINE NINE [] FOUR THREE SIX [] TWO ZERO SIX []

ZERO ZERO NINE []

[] PASS [] 841

~~SECRET~~ 170130Z

[] INFO [] WHIG CITE [] 6744

EARPOP

[] FOR J. GORMAN, S. HUGHES, B. TALSKY
FOR CAPTS MCCLINTICK, GREASALFI, SSGT ELDRED
FOR [] MAJ SCIOTTO, [] MAJ TRUKKEN, ASCO FOR P. TIFFANY
FOR A. FOX, J. CHRISTIANSON, MAJ MCKILLIP

- REF. A. [] 6640
- B. LMSC DOCUMENT AA 02148 REV. 1, 26 MAR 65, AND ADDENDUM I, 20 OCT 55
- C. TECHINS 1301 12 MAY 65

SUBJECT: SUMMARY OF MEETING AT [], 11-12 NOV 65, TO DISCUSS MSN 7160/722 STF AND EXPANDED CTF FOR FUTURE MISSIONS.

1. FOR MISSIONS 7160 AND 7228 ONLY, THE FOLLOWING ADDITIONAL DEFINITIONS WERE AGREED TO FOR STF HEADER RECORD #1 (H001):

A. WORD 14 - INTEGER BINARY COUNT OF TRANSMISSION NUMBER. (FOR ORIGINAL TRANSMISSION OF A BURST ONE WILL BE USED; FOR ANY RERUN(S), TWO, THREE, ETC. WILL BE USED)

B. WORD 6 - (OPERATING MODE INDICATORS)

1) FOR MSN 7228 ONLY: BITS 17-23 WILL BE AN INTEGER BINARY COUNT AS FOLLOWS:

COUNT	DEFINITION
1	NORMAL
2	ALTERNATE MODE #1
3	ALTERNATE MODE #2
4	ALTERNATE MODE #3
5	ALTERNATE MODE #4

- 2) FOR MSN 7160 ONLY:
 - BIT 0: 0 - INHIBIT ON (NORMAL)
 - 1 - INHIBIT OFF
 - BIT 1: 0 - NORMAL
 - 1 - SINGLE PULSE MODE

2. COUNTS RECEIVED FROM THE PAYLOADS WILL BE CONVERTED TO ENGINEERING UNITS AS FOLLOWS: ("N" EQUALS COUNT)

- A. MSN 7160 (GROUP 3-D)
 - 1) PULSE WIDTH (PW)

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RF-2	4
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FOR WIDE PULSE ALARM EQUAL TO ZERO:
 PW EQUALS $0.5 N$ (MICROSECONDS)
 FOR WIDE PULSE ALARM EQUAL TO ONE:
 N EQUALS ZERO: PW EQUALS 40 (MICROSECONDS)
 N NOT EQUAL ZERO: PW EQUALS 34 PLUS $32 N$ (MICROSECONDS)
 2) PULSE REPETITION FREQUENCY (PRF)
 PRF EQUALS $10,000/N$ (PPS)

B. NSN 7226 (SETTER)

1) PRF
 N EQUALS ZERO: PRF EQUALS $1,000,000/18.74$ (PPS)
 N EQUALS 511: PRF EQUALS $1,000,000/7807.0$ (PPS)
 N EQUALS 1 THRU 510:
 PRF EQUALS $1,000,000/(N(15.26) PLUS 13.42)$ (PPS)

2) PULSE AMPLITUDE (PA):
 PA EQUALS $83.75 PLUS 2.5N$ (DBM)

3) FREQUENCY (F)
 F EQUALS $N PLUS 2680$ (MCS)

4) PULSE WIDTH

N	RANGE	OUTPUT VALUE
0	.5 - 1.43	1.0 (MICROSECONDS)
1	1.43 - 2.86	2.1
2	2.86 - 5.72	4.2
3	5.72 AND UP	5.7

3. SAFSP WILL COMPILE A "GLOSSARY" OF ALL KNOWN PARAMETERS, TO REPLACE THE PRESENT 120 - PARAMETER COMMON TAPE FORMAT. A DRAFT OF THIS GLOSSARY WILL BE PRESENTED TO REPRESENTATIVES FROM [REDACTED] AT A MEETING TO TAKE PLACE BEFORE 1 JAN 66, IF POSSIBLE. TIME AND PLACE WILL BE ESTABLISHED LATER. AT THIS MEETING, REVISIONS TO "TRANSMISSION FORMAT" WILL BE DISCUSSED.

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CFN: WILL RERUN UPON REQUEST

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PRIORITY WHIG INFO [] CITE [] 6433

REINDEER-X

REF A. MSN 7148

B. [] 6426

C. TELCON LAROCQUE/KOMLHAAS 8 OCT 65

D. WHIG 1446

E. WHIG 1447 (REINDEER-6, NOT SENT [])

1. RE REF B. PARA 2.C. ALTHOUGH ENTIRE TAPE WILL BE READOUT ANY TIME THERE IS ANY DATA ON IT (BY REAL TIME COMMAND). IF THERE IS LESS THAN 360 SEC OF DATA TO READOUT, A PROPORTIONATELY SHORTER DURATION PASS MAY BE USED FOR READOUT. (E.G. IF THERE ARE 200 SEC. OF DATA OF READOUT, A PASS WITH 200 SEC. DURATION ABOVE 5 DEG. IS ACCEPTABLE.

2. [] WILL TAKE REF. D. FOR ACTION.

3. RE. REF E. PARA. H, WHAT IS MAXIMUM NUMBER OF REVS YOU DESIRE ON A SINGLE MAP PLOT? ALSO, SINCE ORBIT VERY NEARLY REPEATS ITSELF EVERY 137 REVS, WOULD X-YPLOTS FOR REVS 1-138 ONLY BE ACCEPTABLE?

~~TOP SECRET~~

CFN: 6433

REINDEER-X

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WHIC CITE 9355
PROGRAM 770

1. FOLLOWING INFORMATION IS FURNISHED TO ALERT YOU TO THE POSSIBILITY OF A SAFSS-NASA CONFLICT IN PAD LOADING AT AFB IN THE PERIOD JANUARY-MAY 1966.

2. NASA USES PAD 75-1 AND PROGRAM 770 USES PAD 75-2 BUT THEY SHARE A COMMON BLOCKHOUSE. SSD HAS CONTRACTED FOR AN AGE IMPROVEMENT PROGRAM BY DOUGLAS, LMSC AND KELLOG. WORK IS UNDER WAY ON PAD 75-1, AND THE CURRENT SCHEDULE CALLS FOR WORK ON PAD 75-2 AND RELATED BLOCKHOUSE WORK TO BEGIN IMMEDIATELY AFTER THE PROGRAM 770 LAUNCH SCHEDULED FOR 8 JAN 66 AND TO BE COMPLETED IN TIME TO ACCOMMODATE THE NASA NIMBUS LAUNCH IN APRIL 1966. SSD ADVISES THAT IF THE PROGRAM 770 LAUNCH SLIPS BEYOND 15 JANUARY, THERE WILL BE A DAY FOR DAY SLIP IN THE NIMBUS LAUNCH. WE UNDERSTAND THE NIMBUS LAUNCH IN APRIL IS FIRM AT THIS TIME AND THAT IT WILL BE FOLLOWED BY THE FIRST NASA DELTA LAUNCH IN MAY 1966.

3. THE ONLY REASONABLE ALTERNATIVES APPEAR TO BE:

A. CONTINUE AS PLANNED, AND IF PROGRAM 770 SLIPS BEYOND 15 JANUARY INFORM NASA THEY WILL HAVE TO SLIP NIMBUS AND POSSIBLY DELTA. (IT DOES NOT APPEAR POSSIBLE TO PROTECT THE NASA LAUNCH DATES THROUGH USE OF OVERTIME.)

B. RELOCATE THE 8 JAN 66 PROGRAM 770 LAUNCH TO ANOTHER PAD. THIS WOULD COST AT LEAST \$300K TO RELOCATE PROGRAM PECULIAR AGE AND MIGHT ALSO INTERFERE WITH PROJECT 241. THIS IS MOST UNDESIRABLE SINCE IT WOULD UNAVOIDABLE CONFLICT WITH THE EFFORT NECESSARY FOR THE FIRST MULTI-GROUP FLIGHT.

4. WE ARE CURRENTLY ON SCHEDULE FOR A 7 JANUARY LAUNCH, SO THE PROBLEM MAY NOT MATERIALIZE. HOWEVER IF IT SHOULD, I RECOMMEND THE ALTERNATIVE IN 3A AND AM CURRENTLY TAKING THE POSITION WITH SSD.

~~SECRET~~

OPN: 9355 WILL RERUN ON REQUEST
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THIS CITE [] 7219

EARPOP

REF: [] 8997, 6 OCT 1965

1. FOLLOWING CHART UPDATES AND REPLACES THE SIMILAR CHART PRESENTED IN REFERENCE. REVISION IS NECESSARY DUE TO INCORPORATION OF THE LEACH RECORDER FOR THE PRIMARY PAYLOAD.

2. AS BEFORE, COLUMN HEADINGS ARE IN SETTER READ-IN HOURS PER DAY, ROW HEADINGS ARE PRIMARY PAYLOAD READ-IN HOURS PER DAY AND INTERSECTION ENTRIES ARE THE EXPECTED DAYS OF ORBITAL LIFE. ALL OTHER CONSIDERATIONS REMAIN THE SAME

	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.0
5.0	16	17	17	18	19	20	21	21	23	25	27
4.5	17	17	18	20	21	21	22	24	25	28	30
4.0	17	19	20	21	22	24	25	26	28	30	34
3.5	18	20	21	23	24	26	28	30	32	35	39
3.0	20	22	24	26	27	29	31	34	36	39	45
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2.0	24	26	29	32	35	37	39	43	45	PLUS	PLUS
										PLUS	PLUS

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REF: 9219 EARPOP REF [] 8997 6 OCT 1965 1. LEACH RECORDER 2.

	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.0
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4.5	17	17	18	20	21	21	22	24	25	28	30
4.0	17	19	20	21	22	24	25	26	28	30	34
3.5	18	20	21	23	24	26	28	30	32	35	39
3.0	20	22	24	26	27	29	31	34	36	39	45
2.5	21	24	26	28	30	33	36	38	40	45	45
2.0	24	26	29	32	35	37	39	43	45	PLUS	PLUS

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PRIORITY [] INFO [] WORTH WHIS [] CITE [] 6786
REINDEER-X

REF A. NSN 7160/7828
B. [] 2439-5

1. REQUEST REINDEER-24 FOR REF A AS SOON AS POSSIBLE, SO THAT SYSTEM TEST DATA MAY BE SENT AS SOON AS IT IS READY.
2. REINDEER-24 SHOULD INCLUDE
 - (1) PARAMETERS FOR SELECTED TAPE FORMAT BY ITEM NUMBER FROM TECHINS 1301 AS MODIFIED BY LMSC AA 02146, ADDENDUM 1, 20 OCT 65
 - (2) RECORDINGS FROM PAYLOAD ANALOG RECORDER (PRESUMABLY A MINCOM RECORDING AFTER PHASE CORRECTION HAS BEEN MADE.)
 - (3) OTHER COMPUTER-PREPARED DATA
 - (4) DETAILS ON REINDEER-67 XYZ EPHEMERIS DATA, IF REQUIRED (NUMBER OF POINTS, INTERVAL, FREQUENCY OF SUBMISSION)
 - (5) DETAILS OF REQUIRED POST-FLIGHT SUMMARY (INFO SIMILAR TO THAT IN REF B.)

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~~TOP SECRET~~

CITE [] 6786
REINDEER-X

REF A. NSN 7160/7828
B. [] 2439-5

1. REQUEST REINDEER-24 FOR REF A AS SOON AS POSSIBLE, SO THAT SYSTEM TEST DATA MAY BE SENT AS SOON AS IT IS READY.
2. REINDEER-24 SHOULD INCLUDE
 - (1) PARAMETERS FOR SELECTED TAPE FORMAT BY ITEM NUMBER FROM TECHINS 1301 AS MODIFIED BY LMSC AA 02146, ADDENDUM 1, 20 OCT 65
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 - (3) OTHER COMPUTER-PREPARED DATA
 - (4) DETAILS ON REINDEER-67 XYZ EPHEMERIS DATA, IF REQUIRED (NUMBER OF POINTS, INTERVAL, FREQUENCY OF SUBMISSION)
 - (5) DETAILS OF REQUIRED POST-FLIGHT SUMMARY (INFO SIMILAR TO THAT IN REF B.)

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1965 DEC 6 18 19

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PRIORITY [] INFO PRIORITY WHIG [] CITE [] 6818
REINDEER-X
REF A. NSN 7108/228
B. [] 2479-5 (REINDEER-24)
C. [] 6786

1. PARA E, OF REF B, IS NOT IN ACCORDANCE WITH APPENDIX I TO LINGG DOCUMENT AA 02144, 20 OCT 65, WHICH DESCRIBES MODIFICATIONS TO CTY FOR NSN 7108/228. PLEASE CONSULT WITH MR. [] AND MRS. [] WHO WERE AT MEETING ON 11 NOV 65 AT [] WHERE THESE CHANGES WERE THOROUGHLY DISCUSSED, AND THEN RESUBMIT PARA. E.
2. RE PARA. B, WE HAD UNDERSTOOD FROM MR POTTS THAT, RATHER THAN ORIGINAL WORDING, A DUB WITH PHASE CORRECTION WAS DESIRED, PLEASE ADVISE.
3. REQUEST DETAILS OF POST-FLIGHT SUMMARY REQUIREMENT AND SPECIFICS FOR REINDEER-07 (SEE REF. C.)

~~TOP SECRET~~
OTW WILL RETURN UPON REQ
BT

~~TOP SECRET~~
Trans via BYEMAN
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REFERENCE [] 2475-5, PARAGRAPH F: [] CONFIRMS. REQUEST A
"3-D" OUTPUT OF 7160 DATA BE MADE AVAILABLE VIA 1004 TO []
~~BELIEVE EXAMINATION OF THIS OUTPUT CAN BE USED TO EFFECTIVELY DIRECT
PROCESSING PRIORITIES. WE PLAN FOR THE CONTINUED USE OF THE "3-D"
OUTPUT IN OUR PROCESSING OF 2731 AND FOLLOW-ON MISSIONS OF THIS
TYPE.~~

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(FN 0086 2475-5, PARAGRAPH F: CONFIRMS. "3-D" 7160 1004 "3-D"
2731 FOLLOW-ON

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T O P S E C R E T BYEMAN/TALENT KEYHOLE CHANNELS/INCOG

CITE NO. 2653-5
EOP COMOR SIGINT WORKING GROUP MEMBERS
SUBJECT: MISSION 7160/7228 COLLECTION GUIDANCE

1. THE RECENT COMOR RECOMMENDATIONS TO THE NRO, AS STATED IN USIB-D-71/2 (COMOR-D-69/51), SHOULD NOW BE CONSIDERED IN LIGHT OF THE PREVIOUS COLLECTION GUIDANCE ON MISSIONS 7160/7228 WHICH THE COMOR SIGINT WORKING GROUP PROVIDED TO NRO. THESE RECOMMENDATIONS, EMPHASIZING THE CAPABILITIES AND SIGNIFICANCE OF MISSION 7228 AND DE-EMPHASIZING MISSION 7160, HAVE AN OBVIOUS EFFECT UPON THE ACTUAL METHODS WHICH THESE PAYLOADS ARE TO BE OPERATED AND THE COLLECTED DATA REPORTED.

2. IT IS GENERALLY AGREED THAT THE QUALITY OF LOCATIONS TO BE EXPECTED FROM MISSION 7160 IS INSUFFICIENT TO MEET THE CURRENT 10-25 NM LOCATION ACCURACIES CALLED FOR IN THE CURRENT USIB-APPROVED SATELITE SIGINT COLLECTION REQUIREMENTS DOCUMENT, MUCH LESS THE DEDICATED OVERALL GOAL OF 10 NM EXPRESSED BY COMOR. HOWEVER, THE DESIGN SPECIFICATIONS FOR MISSION 7228 ARE EXPECTED TO ENABLE PRODUCTION OF EMITTER LOCATIONS TO WITHIN 7.5 NM AND. FOR THIS REASON, THE COMOR HAS RECOMMENDED (1) THAT THE MISSIONS BE OPERATED SO AS TO MAXIMIZE COLLECTION BY MISSION 7228 AND (2) THAT THE DATA COLLECTED BY MISSION 7228 ENJOY PRIORITY IN PROCESSING AND REPORTING. THE COMOR ALSO SUGGESTS THAT PROCESSING OF MISSION 7160 DATA SHOULD BE ACCOMPANIED SO AS NOT TO CONFLICT WITH EOB PRODUCTION FROM POPPY OR P-1000S.

3. REGARDING THE LESSON LEARNED FROM MISSIONS 7158/7226 WHEREIN THE EARLY FAILURE AND DISABLING OF MISSION 7226 FACILITATED THE EXTREMELY LONG LIFETIME OF MISSION 7158 IT WOULD SEEM ADVISABLE, AT THIS JUNCTION, TO DETERMINE IN WHICH AREAS OF THE SINO-SOVIET BLOC AND SOUTHEAST ASIA MOST PRODUCTIVE USE CAN BE MADE OF MISSION 7160. THE ULTIMATE COVERAGE OF MISSION 7160 SHOULD THEN BE LIMITED TO THOSE AREAS. THIS SHOULD PROVIDE EXTENDED AVAILABILITY OF MISSION 7228

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IN ACCORDANCE WITH THE POWER USAGE VS. LIFETIME MATRIX PREVIOUSLY PROVIDED THE COMINT BY THE NRO.

4. CONSIDERING THE POINTS MADE BY LT. COL. GINN, JSTPS, IN HIS BRIEFINGS OF THE COMINT AND THE COMOR, IT APPEARS TO THE NSA/SWG THAT THE BEST USE OF MISSION 7160 CAN BE MADE IN THOSE GEOGRAPHIC AREAS FOR WHICH THE MOST INADEQUATE DATA BASE IS AVAILABLE (I.E., [REDACTED])

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IT APPEARS THAT IT IS IN THESE AREAS THAT THE BEST USE OF THE QUALITY OF RESULTS ANTICIPATED FROM MISSION 7160 WOULD BE MADE.

5. THE NSA/SWG RECOMMENDS, THEREFORE, THAT THE COLLECTION GUIDANCE FOR MISSIONS 7160/7228 BE AMENDED TO READ AS FOLLOWS:

" THE SWG RECOMMENDS THAT MISSION 7160/7228 BE TASKED AS FOLLOWS:

A. 7228 - FULL TIME COVERAGE BORDER-TO-BORDER WHEN OVER [REDACTED] (TO INCLUDE [REDACTED])

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B. 7160 - COVERAGE OF [REDACTED] AND [REDACTED] TO THE MAXIMUM AVAILABILITY. IT IS UNDERSTOOD THAT THOSE AREAS SELECTED TO FULFILL THIS COVERAGE MAY ALSO COVER THE PERIPHERAL AREAS OVER WHICH THE COLLECTOR MUST PASS IN ORDER TO REACH THE DESIRED TARGET AREAS. MAXIMUM ANALOG BACKUP TO MISSION 7160 SHOULD BE PROVIDED WITH EMPHASIS ON THOSE AREAS OF THE [REDACTED] AND [REDACTED]

[REDACTED] SIGNED: [REDACTED], NSA/SWG

ALTERNATE MEMBER./
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KEYHOLE CHANNELS
ONLY

MEMORANDUM FOR GENERAL STEWART

SUBJECT: SAC Message [redacted] 3714

This is another case where a consumer, (SAC) who has a man, (Barthel), (CIA does the same thing with [redacted] with free access to all levels of a contractor, gets distorted opinionated information and uses it to try to run the program. We will, with support from [redacted] answer SAC, again pointing out the technical errors in their message. Meanwhile we will have [redacted] establish a single point of contact within the contractor's plant for Barthel and hopefully move his office out of the contractor's building.

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The subject of Mission 7160 is on the agenda at the CSWG tomorrow. We presented the mission description last week and will discuss it in detail with them tomorrow, again reviewing the logic of the present schedule and what intelligence it is expected to yield.

The 698BK missions have never been sold on their location finding capability; it is certainly less than required. Mission 7160 is the last 698BK mission prior to the first MULTIGROUP. MULTIGROUP, the result of over two years development, will have significantly better emitter locations. The on-board processing equipment also is to be much improved.

Admittedly, we need more on-orbit experience with the 698BK/MULTIGROUP types of payloads. Meanwhile, if SAC would prefer not to get the raw unprocessed EARPOP data, NSA could easily arrange that and process it all themselves.



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