

TOP SECRET
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DECLASSIFIED ON: 10 JANUARY 2013

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FRMS 100000
SPECIAL DESIGNEES

ACTION: ODL/EOD (266) INFO: PLAQUE-E () FILE: KF, ODL-20, (25/0)

TS 7520113 JTC

PAGE 001

TIME: 232046Z NOV 81

BISU 4244

3 DEC

Walt lbr
Bob M R2M
Terry HW
Rich R
John last

~~TOP SECRET~~ 231500Z NOV 81 CITE BISUN 4244
IMMEDIATE [REDACTED] INFO PRIORITY DITTO [REDACTED]
HANDLE VIA BYEMAN CHANNELS ONLY
GAMBIT/HEXAGON
[REDACTED] FOR D. NAAS/J. HILLS [REDACTED] FOR [REDACTED]
[REDACTED] FOR [REDACTED] INFO [REDACTED] FOR B. PAULSON.
INFO KUNITU FOR [REDACTED]
FROM: GEN KULPA/COL MC CHRISTIAN [REDACTED]
SUBJECT: GAMBIT/HEXAGON LAUNCH PLAN
REF:

- A. [REDACTED] 1522; SUBJ: GAMBIT/HEXAGON LAUNCH SCHEDULE; DATED 23 OCT 81.
- B. [REDACTED] 1651; SUBJ: GAMBIT/HEXAGON LAUNCH PLAN; DATED 17 NOV 81.

1. THE FOLLOWING INFORMATION IS PROVIDED IN RESPONSE TO THE QUESTIONS OF REF A:

(A) REFERENCE (A) REQUESTED US TO PROVIDE INFORMATION AS TO HOW MUCH FILM COULD BE EFFECTIVELY USED FOR A HIGH RESOLUTION GAMBIT DUAL MODE MISSION OF ABOUT 27 TO 30 DAYS DURATION IN THE SPRING OF 1982. SINCE OUR 7 OCT 81 BRIEFING TO COMHEAD, IN WHICH WE PRESENTED VARIOUS OPTIONS FOR DUAL MODE GAMBIT SEARCH/HIGH RESOLUTION MISSIONS, WE HAVE WORKED WITH THE [REDACTED] IN REFINING THE OPERATIONAL STRATEGY FOR A HIGH/LOW GAMBIT MISSION OF 120 DAYS DURATION. WE HAVE RECENTLY COMPLETED ADDITIONAL SIMULATIONS THAT FURTHER REFINE THE GAMBIT 4352 HIGH/LOW SCENARIO. ALL OF THESE SIMULATIONS AND THEIR CORRESPONDING ANALYSES INDICATE THAT [REDACTED] FOR A SPLIT SEARCH/HIGH RESOLUTION WINTER/SPRING GAMBIT MISSION IS AS FOLLOWS:

[REDACTED]
[REDACTED]
[REDACTED] (APPROXIMATELY) USING ABOUT 1/4 OF THE REMAINING FILM. [REDACTED]
[REDACTED] USING THE REMAINING FILM (3/4 OF THE BUCKET) FOR HIGH RESOLUTION COLLECTION. THIS FILM MANAGEMENT STRATEGY WILL MAXIMIZE HIGH RESOLUTION COLLECTION FROM THE LOW ORBIT, WHILE PROVIDING FOR ADDITIONAL SEARCH COLLECTION IN BUCKET TWO AGAINST THE HIGH PRIORITY TWO MONTH CLUSTERS, PRIOR TO THE LOW ALTITUDE TRANSITION.

H
90 day
1/4
L
30
3/4

4352

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1217

Launch - 21 Jan 82
4352-1 - 22 March (60 days, all high - 350 nm)
4352-2 - 19 May (30 days high + 27-30 days low)

26 April 82

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(b) THE PHOTOGRAPHIC PAYLOAD SECTION (PPS) FOR GAMBIT MISSION 4352 CAN BE HELD FOR LAUNCH WITHOUT REFURBISHMENT THROUGH MARCH 1982 WITH NO SIGNIFICANT DECREASE IN RELIABILITY OF PAYLOAD PERFORMANCE. BEYOND THAT POINT, A REFURBISHMENT OF PPS 52 WILL BE REQUIRED. AS YOU RECALL, PPS 52 WAS THE FIRST SYSTEM TO BE MODIFIED FOR DUAL MODE OPERATION AND WAS ORIGINALLY SCHEDULED FOR A DEMONSTRATION FLIGHT IN THE SUMMER OF 1980. BY THE END OF 1981, A SIGNIFICANT PORTION OF THE CRITICAL ELECTROMECHANICAL DEVICES (MOTORS, ENCODERS, BEARINGS, ETC.) WILL APPROACH OR EXCEED EQUIPMENT CALENDAR AND OPERATING LIFE CONSTRAINTS. WHILE THE DEGREE OF RISK IS DIFFICULT TO QUANTIFY, THE RISKS OF ELECTROMECHANICAL COMPONENT FAILURES BEYOND MID-1982 REACHES UNACCEPTABLE LEVELS. THE COST DRIVER ASSOCIATED WITH THE REFURBISHMENT PROGRAM IS PREDOMINANTLY LABOR-INTENSIVE TASKS INVOLVING DISASSEMBLY, REPLACEMENT OF SUSPECT DEVICES, REASSEMBLY, REALIGNMENT AND RETEST OF THE CAMERA AND FILM HANDLING MECHANISMS. WHILE OUR ANALYSIS IS NOT YET COMPLETE, OUR INITIAL ESTIMATES ARE THAT IT MAY REQUIRE UP TO [REDACTED] TO REFURBISH AND EXTEND THE PPS USEFUL LIFE THROUGH 1985. IF IT IS DESIRED TO EXTEND THE CALENDAR LIFE OF PPS 52 THROUGH 1987, MORE EXTENSIVE REFURBISHMENT WOULD BE REQUIRED. THIS EFFORT WOULD REQUIRE UP TO AN ADDITIONAL [REDACTED]

2. AS REQUESTED IN REFERENCE b, WE ARE PROCEEDING WITH OUR PLAN TO [REDACTED] THE MAJOR MILESTONES IN SUPPORT OF THIS EFFORT REMAIN THE SAME AS BRIEFED TO COMERIX ON 7 OCTOBER 1981 AND REFLECTED IN COMERIX MEMORANDUM TO THE DCI, SUBJECT: "PLANNING DATES FOR 1982 GAMBIT AND HEXAGON LAUNCHES," DATED 30 OCTOBER 1981. ADDITIONAL MILESTONES ARE AS FOLLOWS:

- A. 30 NOV - 6 DEC 81 - OPERATIONAL DEVELOPMENT REHEARSAL
- B. 7 DEC - BOOSTER ERECTION ON SLC-40
- C. EARLY JANUARY - RECEIVE PRE-MISSION PLANNING GUIDANCE FROM U/ICE
- D. 4 JAN - SHIP SATELLITE CONTROL SECTION
- E. 7 JAN - SHIP PHOTOGRAPHIC PAYLOAD SECTION
- F. 13 JAN - RECEIVE FLIGHT TARGET FILE FROM [REDACTED]
- G. 21 JAN - LAUNCH

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3. WITH RESPECT TO [REDACTED] MISSION 1217, WE ARE PROCEEDING ON A SCHEDULE CONSISTENT WITH THE PREVIOUSLY IDENTIFIED [REDACTED] MILESTONES IN SUPPORT OF [REDACTED] HEXAGON PROGRAM MILESTONES IN SUPPORT OF A 26 APR LAUNCH DATE ARE AS FOLLOWS:

- A. 24 NOV 81 - RECEIVE COLOR AND COLOR/IR REQUIREMENTS THROUGH NOV 82 FROM U/ICE
- B. 0-11 DEC 81 - OPERATIONAL DEVELOPMENT REHEARSAL
- C. 20 DEC 81 - FILM LOAD DEFINITION
- D. EARLY FEBRUARY 82 - RECEIPT OF PRE-MISSION REQUIREMENTS FROM [REDACTED]
- E. 3 APR 82 - [REDACTED]
- F. 13 APR 82 - SHIP SV-17 TO SLC-4E
- G. 26 APR 82 - LAUNCH

4. IN SUMMARY, ALL ACTIVITIES IN SUPPORT OF THE ABOVE PLANNED LAUNCH DATES ARE PROCEEDING ON SCHEDULE. I WILL KEEP YOU ADVISED OF ANY SIGNIFICANT CHANGES.
REV#1 23 NOV 2001

END OF MESSAGE