FILE INFO

SECRET (When Filled In)

REPRODUCTION PROHIBITED

ACTION	1		6		11		16	
	2		7		12		17	
	3		8		13		18	
	4		9		14		19	
[redacted]	5		10		15		20	

~~T O P S E C R E T~~ 172025Z FEB 71 CITE [redacted]

MAJORITY [redacted] INFO PRIORITY [redacted]

[redacted]

REF A [redacted] (13 FEB 70)

B. TELECON, 16 FEB 71, [redacted] AND [redacted]

WITH [redacted] AND [redacted]

FOLLOWING IS PREVIOUSLY ESTABLISHED ANTISATELLITE CONTINGENCY PLAN DISCUSSED IN REF B. PLAN HAS BEEN UPDATED FOR MISSION 1113. DMU FIRING TABLE WILL FOLLOW BY SEPARATE DATA TRANSMISSION.

1. RANGE OF TIMES BETWEEN ANTISATELLITE LAUNCH AND NEXT AVAILABLE CORONA DMU FIRINGS ARE BEST DETERMINED ON INDIVIDUAL MISSION BASIS.

2. MANY DMU FIRING SEQUENCES ARE PUNCHED ON THE H-TIMER TAPE PRIOR TO LAUNCH. THIS PUNCHING DETERMINES THE LOCATION AS WELL AS MODE

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BOOST OR DEBOOST) OF FIRINGS SELECTABLE DURING FLIGHT. THE CORONA SYSTEM HAS NO CAPABILITY TO FIRE AT OTHER THAN THESE PRE-PUNCHED LOCATIONS. LOCATIONS ARE CHOSEN FOR MAINTENANCE OF ORBIT SHAPE AND COVERAGE PATTERN. NO ATTEMPT IS BEING MADE TO PLACE FIRINGS IN SUCH A MANNER TO PROVIDE AN EVASION CAPABILITY.

[illegible] FIRINGS ARE ENABLED BY TRANSMISSION OF A SINGLE REAL-TIME-COMMAND AT ANY TIME DURING A COMMAND STATION ACQUISITION. IN AN EMERGENCY SITUATION, A CALL TO STC BY STATION ACQUISITION TIME SHOULD ALLOW SUFFICIENT TIME TO ASSURE PROPER TRANSMISSION OF THIS COMMAND. IT SHOULD BE NOTED THAT THIS COMMAND MERELY ENABLES THE FIRING AND DOES NOT FIRE THE ROCKET. ONCE THE FIRING IS ENABLED A ROCKET WILL BE FIRED AT THE NEXT END SEQUENCE ENCOUNTERED ON THE H-TIMER TAPE.

[illegible] A SINGLE END FIRING WILL NOT PREVENT EITHER CONTINUED ACCEPTABLE OPERATION OF THE CAMERA SYSTEM OR RECOVERY ON NEXT DAYLIGHT PASS OVER HAWAIIAN AREA. FIRINGS WITHIN SEVERAL REVS PRIOR TO RECOVERY MAY RESULT IN INCREASED ERROR IN IMPACT PREDICTION AND REDUCED PROBABILITY OF AIR RECOVERY. IN EXTREME EMERGENCIES THE POSSIBILITY OF A NIGHT RECOVERY OVER THE HAWAIIAN AREA SHOULD BE CONSIDERED ALSO.

[illegible] VEHICLE SPATIAL LOCATION AT SOME FIXED TIME AFTER A FIRING WILL VARY FROM THE NO-FIRING (UNPERTURBED) LOCATION ASSOCIATED WITH THE SAME

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TIME APPROXIMATELY AS FOLLOWS:

1. CROSS-TRACK LOCATION WILL DIVERGE FROM NOMINAL AT THE RATE OF [redacted] N.MI. PER REV FOR 3000 LB-SEC ROCKETS.

2. ALONG-TRACK LOCATION WILL DIVERGE FROM NOMINAL AT THE RATE OF [redacted] N.MI. PER REV FOR 3000 LB-SEC ROCKETS.

3. LATITUDE WILL CHANGE FROM 0 TO 14 N.MI. DEPENDENT ON FIRING LOCATION FOR 3000 LB-SEC ROCKETS.

NOTE THAT 3000 LB-SEC ROCKETS WILL PROVIDE TWO-THIRDS OF SPATIAL LOCATION VARIATIONS SHOWN ABOVE. ALSO, ALONG-TRACK DIVERGENCE WILL HAVE NO EFFECT ON CAMERA OPERATIONS COVERAGE SINCE THE H-TIMER IS ADJUSTED TO PROVIDE LATITUDE-SYNCHRONISM BETWEEN NOMINAL AND ACTUAL ORBITS.

F. THE FOLLOWING PROCEDURE IS RECOMMENDED FOR DETERMINATION OF TIME [redacted] AND EVASIVE MANEUVER CAPABILITIES BETWEEN ANTISATELLITE LAUNCH TIME AND DMC FIRINGS FOR MISSION 1113:

1. DETERMINE LIKELY LAUNCH TIME OF ANTISATELLITE IN RELATION TO CORONA ORBIT.

2. COMPARE LAUNCH TIME WITH LISTING OF COMMAND STATION ACQUISITION TIMES PROVIDED DAILY IN [redacted] REPORT.

3. DETERMINE TIME BETWEEN COMMAND STATION ACQUISITION AND

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NEXT AVAILABLE DMU FIRING FROM TABLE DESCRIBED BELOW IN PARA. 6 AND PROVIDED BY SEPARATE DATA TRANSMISSION.

A. DETERMINE TOTAL NUMBER OF REVS BETWEEN NEXT AVAILABLE DMU FIRING AND PROBABLE ANTISATELLITE INTERCEPT POINT. (FRACTIONAL PORTIONS OF REVS SHOULD BE INCLUDED)

B. USE OF TIMES REQUESTED IN REF. A WILL BE THE SUMMATION OF TIMES DETERMINED BY STEPS 2 AND 3 IN ABOVE PROCEDURE.

MINIMUM EVASIVE MANEUVER CAPABILITY (THE CHANGE IN VEHICLE SPATIAL LOCATION AS A RESULT OF THE FIRING) IS OBTAINED BY MULTIPLYING THE NUMBER OF REVS OBTAINED IN STEP 4 TIMES 60 N.MI. PER REV (3000 LB-SEC DMU) OR TIMES 40 N.MI. PER REV (2000 LB-SEC DMU) DEPENDENT UPON SIZE OF THE DMU FIRING. (NOTE THAT THIS COMPUTATION IS SIMPLIFIED TO INCLUDE ONLY ALONG-TRACK DIVERGENCE SINCE THIS IS THE MOST PREDOMINANT FIRING EFFECT). SINCE NOW 1113 HAS ONLY 3000 LB-SEC DMU ROCKETS ONLY 60 N.MI. PER REV COMPUTATION SHOULD BE USED.

C. TABLE OF 1113 DMU FIRINGS/CONTROL IN THE AREA OF PRIMARY INTEREST WILL BE PROVIDED [redacted] BY SEPARATE DATA TRANSMISSION. THIS TABLE WILL INCLUDE ONLY THE SIX REVS PER DAY

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(THREE ASCENDING/THREE DESCENDING) WHICH PASS CLOSEST TO THE TYURATAM LOCATION. (NOTE THAT FOR MISSION 1113 ON ASCENDING PASSES THE TYURATAM LOCATION LIES APPROXIMATELY 0.13 REV FROM THE START OF THE REV WHILE ON DESCENDING PASSES THE LOCATION LIES APPROXIMATELY 0.37 REV FROM THE START).

A BRIEF DESCRIPTION OF THE DATA TO BE PROVIDED IN THIS TABLE IS AS FOLLOWS:

1. ACQUISITION STATION AT WHICH FIRING IS ENABLED.
2. END FIRING REV AND LATITUDE FOR ANY FIRINGS OCCURRING WITHIN THE STATION ACQUISITION.
3. END FIRING REV, LATITUDE, AND TIME FROM ENABLE STATION FOR THE FIRST END FIRING OCCURRING BETWEEN THIS ENABLE STATION AND THE NEXT ACQUISITION.

AN EXAMPLE OF THE USE OF THIS DATA IS AS FOLLOWS:

1. END FIRING DATA FROM TABLE SHOWS BY ENABLING AT REV 7[redacted] END WILL FIRE AT REV 7.75, LATITUDE 48S, APPROXIMATELY 45 MINUTES AFTER [redacted] ACQUISITION.
2. FOR THIS EXAMPLE ASSUME VEHICLE IS 20 MINUTES PRIOR TO 7[redacted] ACQUISITION WITH ANTICIPATED ANTISATELLITE INTERCEPT ON REV 8 AT TYURATAM LOCATION (REV 8.37).

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3. TIME RANGE TO FIRING WOULD BE 68 MINUTES (20 MIN. TO STATION PLUS 48 MIN. TO FIRING).

4. THERE ARE 7.62 REVS BETWEEN FIRING POINT AND PROBABLE INTERCEPT POINT (REV 8.37 MINUS REV 7.75). MINIMUM EVASIVE MANEUVER WOULD BE 37.2 N.MI. FOR 3000 LB-SEC ROCKET (7.62 REVS TIMES 68 N.MI. PER REV) AND 24.8 N.MI. FOR 2000 LB-SEC ROCKET.

4. REFERENCE TO A SPECIFIC CASE WAS, IN OUR OPINION, THE BEST WAY TO ASSIST [redacted] IN DEVELOPING AN APPROACH TO CONTINGENCY PLANNING. IF A FIRM CONTINGENCY PLAN IS DESIRED FOR THE REMAINDER OF THE CORONA PROGRAM, IT IS RECOMMENDED THAT THE INTERESTED PARTIES MEET TO DEFINE THE NATURE OF THE THREAT, DISCUSS SYSTEM CAPABILITIES, AND DEVELOP SPECIFIC REQUIREMENTS AGAINST WHICH THE PLAN CAN BE DEVELOPED.

SECRET

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