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MONTHLY REPORT
FOR THE MONTH OF MAY
1970

Prepared: 15 June 1970

Declassified and Released by the N R C

In Accordance with E. O. 12958

on NOV 26 1997

GP-1

EXCLUDED FROM AUTOMATIC
REGRADING: DOD DIR 5200.10
DOES NOT APPLY

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MISSION 1110-1 SUMMARY

O MISSION 1110-1, AGENA 1656, PAYLOAD CR-11

O LAUNCH BOOSTER: S/N 045

O LAUNCH DATE: 20 MAY 1970

O PAYLOAD TYPE: J-3

O ORBIT PARAMETERS:

	<u>ACTUAL (REV. 38)</u>	<u>ACTUAL (REV. 42)</u>
INCLINATION	82.99°	82.99°
PERIOD	88.51 MIN.	88.73 MIN.
PERIGEE HEIGHT	89.66 N. MI.	98.24 N. MI.
APOGEE HEIGHT	137.14 N. MI.	136.37 N. MI.
PERIGEE LOCATION	246.89 DEG. N.	234.14 DEG. N.

O FIRST MISSION: 11 DAYS, AIR RECOVERY, 6,249 FRAMES

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MISSION PERFORMANCE

MISSION 1110-1

O	PANORAMIC CAMERAS:	NORMAL
O	STELLAR/INDEX CAMERA:	NORMAL
O	PMU AND CLOCK:	NORMAL
O	INSTRUMENTATION AND COMMAND SYSTEM:	NORMAL
O	YAW PROGRAMMER:	NORMAL
O	THERMAL CONTROL	MASTER CAMERA - 62°F (AVERAGE) SLAVE CAMERA - 61°F (AVERAGE)
O	EARLY "A" TO "B" TRANSFER:	NORMAL
O	PHOTOGRAPHIC PERFORMANCE:	MIP 90 -1 MISSION - FAIR TO GOOD
O	BOOSTER PERFORMANCE:	NORMAL
O	SEPARATION EVENTS:	NORMAL
O	AGENA PERFORMANCE:	NORMAL

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RECOVERY PERFORMANCE

MISSION 1110-1

O	RECOVERY ON ORBIT 179, 31 MAY 1970	
O	DE-BOOST EVENTS:	NORMAL
O	PARACHUTE EVENTS:	NORMAL
O	IMPACT DISPERSION:	NORMAL
O	AIRCRAFT PICKUP:	NORMAL

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MISSION 1110-1 SUMMARY

O PAN CAMERAS

- o BOTH OPERATIONAL THROUGHOUT THE MISSION. OVERALL IMAGE QUALITY LESS THAN PREVIOUS MISSIONS. ASSIGNED MIP OF 90.
- o PHOTO QUALITY DEGRADED BY SYSTEMATIC OUT-OF-FOCUS AREAS. AFT RECORD QUALITY SLIGHTLY LESS THAN FORWARD.

O DISC CAMERAS

- o STELLAR FORMATS CONTAIN 8 TO 15 POINT-TYPE IMAGES. ONLY CHARACTERISTIC MARKINGS PRESENT.
- o TERRAIN IMAGE QUALITY IS GOOD, WHERE NOT DEGRADED BY STATIC FOG. INTENSE STATIC FOG PRESENT, ASSOCIATED WITH SEVERAL FINE EMULSION SCRATCHES.

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J-3 SYSTEM STATUS

O

ENGINEERING & OPERATIONS ANALYSIS SUMMARY

- O CR-11 (FLIGHT MISSION 1110)
 - O COMPLETED ALL LAUNCH PREPARATIONS.
 - O PREPARED AND PRESENTED LAUNCH READINESS BRIEFINGS FOR R-7 AND R-1 READINESS REVIEWS AT VAFB. CONDUCTED DD-250 BUYOFF MEETING FOR CUSTOMER REPRESENTATIVES.
 - O ISSUED MASS PROPERTIES REPORT.
 - O PROVIDED THERMAL TAPE PATTERN AND ENGINEERING LIAISON FOR APPLICATION AND INSPECTION OF THERMAL SURFACES.
 - O PERFORMED ALL PRE-FLIGHT ENGINEERING AUDITS.
 - O COMPLETED SYSTEM FUNCTIONAL SCHEMATIC BOOK.
 - O COMPLETED SCF, AUGGIE COORDINATION AND READINESS AND ROMANCE.
 - O COMPLETED RECEIVING AND POST-MATE CONFIDENCE.
 - O COMPLETED PREPARATION OF THE H-TIMER SEQUENCE; GENERATION OF SOC AND A/P PLANNING DATA; PREPARATION OF POST-VERIFICATION DATA.

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J-3 SYSTEM STATUS (CONT'D)

O

ENGINEERING & OPERATIONS ANALYSIS SUMMARY (CONT'D)

O CR-11 FLIGHT MISSION 1110 (CONT'D)

O ADDITIONAL DAILY DATA WERE REQUIRED FOR THIS MISSION TO SUPPORT THE TRANSIT BEACON.

- BEST-GUESS DISC INDEPENDENT OPERATIONS CONSUMPTION/ COVERAGE DATA.

- LOOK-AHEAD TRANSIT/ACQUISITION/BEACON STATUS DATA.

- BEST-GUESS LOOK-AHEAD EPHEMERIS.

O COMPLETED -1 SRV TAPE RECORDER SUMMARY - DATA NORMAL.

O CR-12

O PROVIDED TEST INTEGRATION AND DATA ANALYSIS SUPPORT OF DEMONSTRATION RUN. CONDUCTED SYSTEM STORAGE AUDIT MEETING WITH CUSTOMER REPRESENTATIVES. SYSTEM IS IN STORAGE.

O CR-13

O PROVIDED TEST INTEGRATION AND DATA ANALYSIS SUPPORT FOR HIVOS RETEST. HIVOS DATA AND FILM ANALYSIS IS COMPLETE, REPORT IN PROCESS. SYSTEM BEING PREPARED FOR BLOCK TESTING. DISC S/N 8 TO NEW YORK FOR CORRECTIVE ACTION ON CORONA MARKING. (SEE "PROBLEMS").

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J-3 SYSTEM STATUS (CONT'D)

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○ ENGINEERING & OPERATIONS ANALYSIS SUMMARY (CONT'D)

○ QR-2

- COMPLETED HIVOS TEST. SLIT-WIDTH DRIVE PROBLEM BEING INVESTIGATED BY BOSTON. (SEE "PROBLEMS").
- COMPLETED FUNCTIONAL TEST ANALYSIS, VIBRATION AND PRE-CHAMBER CONFIDENCE. PROVIDED CHAMBER TEST SUPPORT. COMPLETED CHAMBER TEST ANALYSIS. CHAMBER TEST REPORT IN PROGRESS.

○ CR-14

- COMPLETED SYSTEM FUNCTIONAL AND ACCEPTANCE VIBRATION. BEING PREPARED FOR HIVOS TEST ON JUNE 2, 1970.

○ RELOCATION

- COMPLETED MOVE PLAN FOR RELOCATION TO BUILDING 156. CONTINUING COORDINATION AND MOVE PREPARATIONS.
- CONTINUED PREPARATION OF TRAINING CLASS NOTES AND BRIEFING AIDS FOR NEW SUNNYVALE TECHNICIANS.

○ ELECTRICAL ENGINEERING

- PREPARED AND RELEASED EDL FOR CONFIGURATION AUDIT PURPOSE FOR CR-13 THROUGH CR-16, QR-2, AND CR-8.
- CONTINUED MAINTENANCE OF SYSTEM FUNCTIONAL SCHEMATIC BOOK. DIFFERENCES FOR CR-12 AND UP PRESENTLY BEING INCORPORATED.

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J-3 SYSTEM STATUS (CONT'D)

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O ENGINEERING & OPERATIONS ANALYSIS SUMMARY (CONT'D)

O ELECTRICAL ENGINEERING (CONT'D)

- O ALL TOP INSTALLATION DRAWINGS RECLASSIFIED TO CONFORM TO LOCKHEED SYSTEM.
- O SINGLE AND FOUR-CHANNEL PROGRAM TIMER DEVELOPMENT CONTINUING AT [REDACTED] BREADBOARD DESIGN AND TESTING COMPLETED FOR BOTH THE SINGLE AND FOUR-CHANNEL TIMERS. PRELIMINARY PARTS LIST HAS BEEN APPROVED. REVIEW OF TEST PROCEDURES CONTINUING.
- O MODIFIED PROGRAM TIMER TEST PANELS (SINGLE AND FOUR-CHANNEL) TO ACCOMMODATE ADDITIONAL TEST POINTS AVAILABLE ON [REDACTED] PROGRAM TIMERS.

O MECHANICAL ENGINEERING

- O CONTINUED PERIODIC AUDITS AND LIAISON SUPPORT FOR CR-12, CR-13 AND QR-2.
- O ISSUED WEIGHT AND POWER SUMMARY FOR REMAINING PAYLOAD SYSTEMS.
- O CONTINUED EVALUATION OF ORBITAL TEMPERATURES AND THERMAL PATTERNS.
- O CONTINUED EVALUATION OF MOTORIZED TILT SLING - INITIATED MINOR DESIGN REVISIONS.
- O CONTINUED REVISION AND UPDATING OF GHE MANUAL.
- O COMPLETED LAZY SUSAN STOP BLOCK MOD FOR USE ON BLOCK IN NEW FACILITY.

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J-3 SYSTEM STATUS (CONT'D)

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O ENGINEERING & OPERATIONS ANALYSIS STATUS (CONT'D)

O MECHANICAL ENGINEERING (CONT'D)

- O COMPLETED MOD FOR CR-8 SILVER DOLLAR DIAPHRAGM. CONVERTING OLD DOLLAR TO PRESENT CONFIGURATION (DIFFERENCE IN ARRANGEMENT OF HOLES FOR ELECTRICAL INTERFACE CONNECTORS).
- O CONTINUED EVALUATION OF PMU PERFORMANCE VS. "C" PROBLEM FOR DISC SYSTEM.

O MANUFACTURING SUMMARY

- O CR11 PINS WERE ADDED TO THE FAIRING SPIN-OFF DISCONNECTS. SLP CONDITIONER (S/N 211) WAS REPLACED BY S/N 213.
- O CR12 PINS WERE ADDED TO THE FAIRING SPIN-OFF DISCONNECTS.
- O CR13 PINS WERE ADDED TO THE FAIRING SPIN-OFF DISCONNECTS. SLP CONDITIONER (S/N 213) WAS REPLACED BY S/N 211, AND WAS MODIFIED TO CR-13's CONFIGURATION. THE COMMAND BOX WAS REWORKED. THE TRANSFER BOX FAILED DURING HIVOS AND WAS REWORKED PER FEDR DISPOSITION.
- O QR-2 PINS WERE ADDED TO THE FAIRING SPIN-OFF DISCONNECTS. THE COMMAND BOX WAS REWORKED AND RETURNED TO FUNCTIONAL TEST. THE AFT T/M IS IN FUNCTIONAL TEST.
- O CR14 THE FELT SEAL ON THE CONIC STRUCTURE WAS REWORKED. PINS WERE ADDED TO THE FAIRING SPIN-OFF DISCONNECTS.
THE COMMAND BOX WAS REWORKED AND RETURNED TO FUNCTIONAL TEST.
THE AFT T/M BOX IS IN FUNCTIONAL TEST.

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J-3 SYSTEM STATUS (CONT'D)

O MANUFACTURING SUMMARY (CONT'D)

- O CR15 THE FAIRING SPIN-OFF DISCONNECTS WERE PINNED.

REWORK OF THE AFT T/M BOX (S/N211) WAS COMPLETED PER FEDR DISPOSITION RESULTING FROM THE RIPPLE FILTER FAILURE. THE AFT T/M WAS IN FUNCTIONAL TEST AT MONTH END. ALL OTHER BOXES ARE COMPLETE AND DELIVERED TO TEST.

- O CR16 PINS WERE ADDED TO THE FAIRING SPIN-OFF DISCONNECTS.

ALL BOXES ARE COMPLETE AND DELIVERED TO TEST EXCEPT FOR THE AFT T/M WHICH IS IN FUNCTIONAL TEST.

- O CR8 THE SYSTEM WAS CARTED TO QA ON 1 JUNE 1970 WITH SEVEN BOXES INSTALLED. THE AFT T/M, COMMAND BOX, AND SWITCH PROGRAMMER ARE IN FUNCTIONAL TEST. THE TRANSFER BOX WAS BEING USED BY TEST IN CONJUNCTION WITH CR13'S TRANSFER BOX FAILURE AT THE TIME OF CART. THE BOX IS PRESENTLY IN TEST.

- O SUB-ASSEMBLIES

- O TUNA THE LAST SPARE UNIT WAS COMPLETED AND DELIVERED TO TEST.

- O PRESSURE ALL UNITS WERE REWORKED PER T33-270 B2. PRESSURE DIAPHRAGM DIAPHRAGMS WERE ASSIGNED TO SYSTEMS AS FOLLOWS:

SYSTEM	S/N
CR12	1014
CR13	0315
QR2	1012

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J-3 SYSTEM STATUS (CONT'D)

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○ MANUFACTURING SUMMARY (CONT'D)

○ SUB-ASSEMBLIES - PRESSURE DIAPHRAGM (CONT'D)

<u>SYSTEM</u>	<u>S/N</u>
CR14	0316
CR15	0317
CR16	0318
CR8	0308

○ SPARE BOXES

THE SECOND SPARE SLP (S/N 218) WAS RECEIVED FROM SV. BOTH SLP'S, S/N 217 AND S/N 218; AND THE SWITCH PROGRAMMER, S/N 217 ARE IN FUNCTIONAL TEST. THE REMAINING SPARE BOXES ARE ALL IN WORK AT A/P WITH ECD'S TO FUNCTIONAL TEST AS FOLLOWS:

<u>DESCRIPTION</u>	<u>ECD</u>
AFT T/M (S/N 217)	18 JUNE 1970
SLOPE PROGRAMMER (S/N 217)	10 JUNE 1970
COMMAND (S/N 217)	17 JUNE 1970
AFT T/M (S/N 218)	22 JUNE 1970
SLOPE PROGRAMMER (S/N 218)	11 JUNE 1970
COMMAND (S/N 218)	24 JUNE 1970
SWITCH PROGRAMMER (S/N 218)	25 JUNE 1970

○ AGE

- APC CONSOLE - S/N 105 WAS UPDATED TO THE LATEST CHANGES AND DELIVERED TO AGE.

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J-3 SYSTEM STATUS (CONT'D)

O

MANUFACTURING SUMMARY (CONT'D)

O SUB-ASSEMBLIES - AGE (CONT'D)

- O J-3 SYSTEMS CONSOLE - 400 CYCLE POWER BACK-UP MODS WERE INCORPORATED INTO S/N 02 AND THE CONSOLE RETURNED TO AGE. S/N 04 WAS UPDATED TO THE LATEST CHANGES AND DELIVERED TO AGE.
- O PAYLOAD SIMULATOR - PROTECTION DIODE BYPASS MODS WERE INCORPORATED INTO S/N'S 02 AND 05 AND RETURNED TO AGE. S/N 06 WAS UPDATED TO THE LATEST CHANGES AND DELIVERED TO AGE JUNE 1, 1970.
- O EMERGENCY POWER BACK-UP UNIT - 400 CYCLE POWER BACK-UP MODS WERE INCORPORATED INTO THE FIRST UNIT AND DELIVERED TO AGE. ERRORS WERE FOUND WHILE TESTING THE UNIT. NEW E.O.'S WERE RELEASED TO CORRECT THE PROBLEM AND WERE INCORPORATED INTO THE FIRST UNIT, AND THE UNIT RETURNED TO AGE. THE SECOND UNIT IS IN WORK WITH AN ECD TO AGE OF JUNE 12, 1970.
- O SINGLE-CHANNEL AND FOUR-CHANNEL PROGRAM TEST PANEL - BOTH UNITS WERE IN THE ELECTRICAL SHOP WAITING FOR NEWLY RELEASED PRINTS TO BE INCORPORATED AT MONTH END.

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J-3 SYSTEM STATUS (CONT'D)

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O TEST

O CR8 INSTRUMENTS ARE BEING REFURBISHED AT BOSTON.

O CR12 DR. "A" PREPS

O CR13 BLOCK

O QR2 POST HIVOS

O CR14 IN HIVOS

O CR15 TEMPORARY STORAGE.

O ELECTRICAL AGE

O P/L SIMULATOR

S/N 006 RECEIVED FROM MANUFACTURING AFTER E.O. INCORPORATION AND IS BEING USED FOR CHECKOUT OF CONSOLE S/N 03. S/N 004 DELIVERED TO MFG. FOR REWORK 6-2-70. S/N 002, 003, AND 005 IN USE.

O SECONDARY P/L
SIMULATOR

NO CHANGE. S/N 001 AND 002 IN USE. S/N 003 AT A/P FOR BACK-UP UNIT.

O AUTOMATIC
PROGRAMMER
CONSOLE

NO CHANGE, S/N 104 IN USE, 103 IN AGE AREA, AVAILABLE FOR USE, 105 AWAITING TEST.

O SYSTEM CHECKOUT
CONSOLE

S/N 01, AND 05 IN USE. S/N 03 CHECKOUT IN PROGRESS. BACK-UP POWER CIRCUITRY BEING CHECKED. ECD SLIPPED TO 6-10-70. S/N 04 IN MANUFACTURING. ECD 6-5-70.

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J-3 SYSTEM STATUS (CONT'D)

COMPONENT STATUS

o ALL SYSTEMS FLIGHT BOXES ARE COMPLETED WITH THE EXCEPTION OF:

o CR15 PMU (S/N 1016) REQUIRES VIBRATION, ECD 17 JUNE 1970.

o CR16 AFT T/M - IN TEST IN PRE-POT. PCM AND ELECTRICAL COMMUTATORS RECEIVED 3 JUNE 1970. PMU, PCM AND ECU REQUIRE VIBRATION. ECD 17 JUNE 1970.

o CR8 AFT T/M - IN TEST - PREPOT, PCM AND ECM RECEIVED IN TEST AND BOTH REQUIRE VIBRATION. ECD 16 JUNE 1970. PMU (S/N 1018) REQUIRES VIBRATION. ECD 17 JUNE 1970. TUNA (S/N 1021) REQUIRES VIBRATION. ECD 12 JUNE 1970. SWITCH PROGRAMMER READY FOR VIBRATION 9 JUNE 1970.

VECTOR PCM DELIVERY SCHEDULE AS OF 31 MAY 1970

S/N 8	IN HOUSE
S/N 9	IN HOUSE
S/N 10	16 JUNE 1970
S/N 11	29 JUNE 1970

o TUNA COMPLETE THRU CR16. (THREE SPARES TO BE ACCEPTANCE TESTED).

o PMU COMPLETE THRU CR14. CR15 IN TEST.

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J-3 SYSTEM PROBLEMS

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ENGINEERING

- ○ QR2 INSTRUMENT EXHIBITED SLIT WIDTH OSCILLATIONS DURING SHUTDOWN. PROBLEM CAUSED BY REMOVAL OF OPERATE COMMAND TO SWITCH PROGRAMMER PRIOR TO POWER OFF IN INSTRUMENTS. SDRD 104 PROVIDES DIRECTION FOR CORRECTING THE PROBLEM, I.E., A CHANGE IN THE COMMAND BOX TO USE THE UNREGULATED BUS FOR SWITCH PROGRAMMER COMMANDS. MOD TO BE ACCOMPLISHED ON CR8, QR2 AND CR13 - CR16.

- ○ CR13 DISIC S/N 8 EXHIBITED UNACCEPTABLE 'C' MARKING DURING SECOND HIVOS. UNIT TO BE SHIPPED TO NEW YORK FOR REALIGNMENT AT SLP DATA HEAD AND DIMENSION VERIFICATIONS. UNIT IS EXPECTED TO BE READY FOR FLIGHT WITH CR13 WITHOUT ADDITIONAL HIVOS TESTING.

MANUFACTURING

- ○ PCM THE ECD'S FOR S/N'S 008 AND 009 SLIPPED TO JUNE 2, 1970 BECAUSE OF TEST PROBLEMS. THE ECD'S FOR S/N 010 AND S/N 011 ARE JUNE 14, AND JULY 5, 1970, RESPECTIVELY.
- ○ TAPE RECORDERS - S/N 001 FAILED ACCEPTANCE TESTING AT A/P AND WAS RETURNED TO [REDACTED] FOR REPAIR. NO ECD IS AVAILABLE FOR THE RETURN OF THIS UNIT. S/N 002 WAS RECEIVED MAY 11, 1970, TESTED AND FOUND TO BE WITHIN SPECIFICATION. THE NEXT SCHEDULED DELIVERY IS FOR TWO RECORDERS ON JULY 1, 1970.
- ○ T33-5122 FOUR-CHANNEL [REDACTED] TIMER - NO ECD IS AVAILABLE FOR THE REMAINING TWO UNITS AT [REDACTED]

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J-3 SYSTEM PROBLEMS (CONT'D)

TEST

o LOST TIME

PAYLOAD DAYS LOST PROBLEMS

CR11 12 SYSTEM PREVIOUSLY PREPARED FOR FLIGHT WITH UTB AND ABORTED. THEREFORE ALL FLIGHT PREPS INCLUDED AS LOST TIME BECAUSE OF SWITCH TO STB.

CR12 - SYSTEM REMOVED FROM STORAGE FOR PURPOSE OF A DEMONSTRATION RUN. DURING LAST OPERATION, LOST POWER AND SHEARED BOTH PINS. REPLACED SHEARED PINS.

CR13 16 HIVOS RETEST DUE TO UNACCEPTABLE CORONA. NEW ROLLERS INSTALLED. OUTPUT AO INSTALLED AFTER FIDUCIAL LAMP ADJUSTMENT. (INSTRUMENT 327). REPLACED INSTRUMENT 327 INBOARD RAIL LAMP. RAMP UP CHECKS REQUIRED REDOING. DURING P/L RETRIEVAL FROM LIVE RUN, P/L WAS PULLED OFF HUB, HAD TO RECYCLE SRV 'B'. HIVOS TEST NO. 2 INSTRUMENT 2 SHEARED PIN ON LAST DAY IN CHAMBER. REMOVED INSTRUMENTS FROM BARREL TO INVESTIGATE PROBLEM. INVESTIGATION CONTINUING

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J-3 SYSTEM PROBLEMS (CONT'D)

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O TEST

O LOST TIME

PAYLOAD DAYS LOST PROBLEMS

CR13 16

HIGH EFFICIENCY AMPLIFIER REMOVED FROM INSTRUMENT 2. BOSTON CHECKING SLP FOUND HEAD-TO-CLAMP CLEARANCE .010", SHOULD BE .040"; READJUSTED.

QR2 5

SCAN HEADS CHECKED FOR OIL MIGRATION, AND ALSO SLIT MALFUNCTION. FOUND PROBLEM TO BE IN POTENTIOMETER.

CR14 -

FUNCTIONAL TEST. HAD A FAILURE ON INSTRUMENT 2, HAD TO REPLACE/REPAIR PARTS OF SHUTTLE ASSEMBLY. S/N 615 DRCG "1'S" BITS LOW ON VOLTAGE, REPLACED CLOCK WITH S/N 629. FOUND RAMP UP TIMES 5 MILLI-SECONDS OUT OF SPEC, BOUGHT OFF.

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ENGINEERING & OPERATIONS ANALYSIS STATUS

○ INTEGRATION

- CONDUCTED PRE-CHAMBER CRITIQUES FOR CR13 RETEST, QR2 AND CR14.
- CONDUCTED POST-CHAMBER CRITIQUES FOR CR13 RETEST AND QR2.
- COMPLETED THE REVISION SUPPLEMENT FOR THE J-3 TRAINING MANUAL. RELEASE OF STAMPED MANUALS AND SUPPLEMENTS ECD IS JUNE 5, 1970.
- PREPARED BRIEFING CHARTS FOR THE SV TRAINING SESSIONS INCLUDING REVIEW OF TEST PLANS AND TEST DIRECTIVES.
- COMPLETED REWRITE OF THE A/P STATEMENT OF WORK FOR LEVEL OF EFFORT CONTRACT.
- COMPLETED AUDIT OF SCHEMATICS UTILIZED IN J-3 FUNCTIONAL SCHEMATIC BOOK.
- RELEASED FOLLOWING SDRD'S AND EAR'S:

SDRD #075-1 ADDITION OF CR11 TO EFFECTIVITY OF SLP
ADJUSTMENT CHANGE.

SDRD #104 SLIT WIDTH COMMAND EXCITATION CHANGE.
EAR #12 ANALYSIS OF SLIT WIDTH SERVO OSCILLATION
PROBLEM.

○ SYSTEM PERFORMANCE EVALUATION

- EVALUATION OF FLIGHT FILM FROM ENGINEERING OPERATIONS ON CR10 (MISSION 1109) IS IN PROGRESS.
- POST-FLIGHT REPORT PREPARATION CONTINUES ON J-46, CR7, CR9 AND CR10.

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ENGINEERING & OPERATIONS ANALYSIS STATUS (CONT'D)

O MISSION PROGRAMMING & OPERATIONS

- o COMPUTER PROGRAMS WERE REQUIRED TO PROVIDE TRANSIT BEACON DATA.
- o A PROGRAM WAS WRITTEN TO AID CHECKING OF THE EXPOSURE VALUES REPORTED IN THE PERFORMANCE ESTIMATE.

O

- o ON-CALL MAINTENANCE PERFORMED IN MAJOR MODULES SETUP AND POSTPASS.

- o THIS PROGRAM TO PROCESS OUTPUT FROM HEADQUARTERS PROGRAM [REDACTED] READY FOR HEADQUARTERS INTEGRATION.

O AREA HISTORY FILE

- o MINOR ON-CALL MAINTENANCE PERFORMED.

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CONTROL SYSTEM AND



J1-J3 Flight Schedule - contracted

	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N
FLIGHT SYSTEM	CR-9 FLOWN						CR-10 FLOWN		CR-11 FLOWN			CR-12			CR-13
R-25 BACKUP										CR-12	CR-13	CR-13	CR-13		QR-2
STORAGE												QR-2			CR-14 CR-15
MISSION	1052			1108			1109		1110			1111			1112
VEHICLE	1653			1655			1657		1658			1654			1659

	D	J	F	M	A	M	J	J	J	A	S	O	N	D	J	F	M	A	M	J	1972
	QR-2	CR-14	CR-15		CR-15		CR-15				CR-16		CR-8								
QR-2	CR-14	CR-15	CR-14	CR-15	CR-16	CR-16	CR-16	CR-16	CR-8			CR-8									
	CR-15	CR-16			CR-8																
	1113	1114		1115					1116				1117								
	1658	1660		1661					1662				1663								

NOTE: 1655 AND SUBSEQUENT VEHICLES WILL USE SOLAR ARRAYS AND SGLS FOR COMMAND AND T/M.

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O UNNEGOTIATED AWA'S

<u>AWA NO.</u>	<u>CHANGE</u>	<u>PLANNED PRICE</u>
[REDACTED]	GFE COMPUTER OPERATION	[REDACTED]
[REDACTED]	TIMERS	[REDACTED]

ROM TOTAL

* APPROVED AWA. PARTIAL COSTS INCLUDED IN ACTUALS.

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CONTROL SYSTEMS

RELOCATION

<u>AWA</u>	<u>PLANNED COST</u>	<u>FUNDED COST</u>	<u>ACTUAL EXPENDED AND COMMITTED</u>
* - 5 FACILITIES			
** - 8 VAULT STORAGE THIRD FLOOR			
** - 10 CONFERENCE ROOM PRODUCT ROOM			
** - 12 STORAGE AREA SECOND FLOOR			
PENDING RELOCATION COSTS			
TOTAL			

* NEGOTIATED (NON FEE BEARING)

** PENDING AWA'S (NON FEE BEARING)

PROGRAM OFFICE
ADMINISTRATION & CONTROLS
OPS & ANAL, ENGRG & INTEG
MANUFACTURING & TEST
QUALITY ASSURANCE

CONTRACT SUMMARY

LEVEL OF EFFORT - FY '70 - - - - - TOTAL

HOURS

	J	A	S	O	N	D	J	F	M	A	M	J
PLANNED (mo)	32,989	28,193	27,433	35,385	24,978	21,911	27,996	29,845	28,065	33,239	26,541	26,910
PLANNED (cum)	32,989	61,182	88,615	124,000	148,978	170,889	198,885	228,730	256,795	290,034	316,575	343,485
ACTUAL (mo)	26,170	23,075	26,297	40,743	28,075	26,739	33,195	27,963	25,268	32,811	25,508	
ACTUAL (cum)	26,170	49,245	75,542	116,285	144,360	171,099	204,294	232,257	257,525	290,336	315,844	

DOLLARS (000) (price/cost-fee)

	J	A	S	O	N	D	J	F	M	A	M	J
PLANNED (mo)												
PLANNED (cum)												
ACTUAL (mo)												
ACTUAL (cum)												

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PROGRAM OFFICE

ADMINISTRATION & CONTROLS
OPS & ANAL, ENGRG & INTEG-
MANUFACTURING & TEST
QUALITY ASSURANCE

LEVEL OF EFFORT - FY '70 - - - CONTRACT SUMMARY

HOURS

	J	A	S	C	N	D	J	F	M	A	M	J
PLANNED (mo)	825	686	654	858	617	584	701	610	581	763	581	610
PLANNED (cum)	825	1,511	2,165	3,023	3,640	4,224	4,925	5,535	6,116	6,879	7,460	8,070
ACTUAL (mo)	650	388	603	646	528	446	843	665	644	987	710	
ACTUAL (cum)	650	1,038	1,641	2,287	2,815	3,261	4,104	4,769	5,413	6,400	7,110	

DOLLARS (000) (price/cost-fee)

	J	A	S	O	N	D	J	F	M	A	M	J
PLANNED (mo)												
PLANNED (cum)												
ACTUAL (mo)												
ACTUAL (cum)												

~~TOP SECRET/C~~

~~HANDLE VIA~~
~~CONTROL SYSTEM ONLY~~

~~TOP SECRET/C~~

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PROGRAM OFFICE

ADMINIS & CONTROLS

OPS & ANAL, ENGRG & INTEG-

MANUFACTURING & TEST

QUALITY ASSURANCE

LEVEL OF EFFORT - FY '70 - - - CONTRACT SUMMARY

HOURS

	J	A	S	O	N	D	J	F	M	A	M	J
PLANNED (mo)	1,833	1,525	1,743	2,287	1,507	1,298	1,576	1,372	1,307	1,715	1,307	1,372
PLANNED (cum)	1,833	3,358	5,101	7,388	8,895	10,193	11,769	13,141	14,448	16,163	17,470	18,842
ACTUAL (mo)	1,641	1,295	1,417	2,015	1,425	1,362	1,745	1,581	1,365	2,140	1,827	
ACTUAL (cum)	1,641	2,936	4,352	6,367	7,792	9,154	10,899	12,480	13,845	15,985	17,812	

DOLLARS (000) (price/cost-fee)

	J	A	S	O	N	D	J	F	M	A	M	J
PLANNED (mo)												
PLANNED (cum)												
ACTUAL (mo)												
ACTUAL (cum)												

~~TOP SECRET/C~~

HANDED VIA

CONTROL SYSTEM ONLY

~~TOP SECRET/C~~

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PROGRAM OFFICE

ADMINISTRATION & CONTROLS

OPS/ANAL-ENG/INTEG

MANUFACTURING & TEST

QUALITY ASSURANCE

LEVEL OF EFFORT - FY '70 - - - CONTRACT SUMMARY

HOURS

	J	A	S	O	N	D	J	F	M	A	M	J
PLANNED (mo)	11,181	9,330	8,977	11,544	8,190	7,759	10,430	9,896	9,620	12,137	9,622	9,897
PLANNED (cum)	11,181	20,511	29,488	41,032	49,222	56,981	67,411	77,307	86,927	99,064	108,686	118,583
ACTUAL (mo)	9,739	8,230	8,356	11,778	8,276	8,500	10,968	9,834	10,147	12,297	9,581	
ACTUAL (cum)	9,739	17,969	26,325	38,103	46,379	55,279	66,247	76,081	86,228	98,525	108,106	

DOLLARS (000) (price/cost-fee)

	J	A	S	O	N	D	J	F	M	A	M	J
PLANNED (mo)												
PLANNED (cum)												
ACTUAL (mo)												
ACTUAL (cum)												

~~TOP SECRET/C~~

HANDLE VIA

PROGRAM OFFICE
ADMINISTRATION & CONTROLS
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MANUFACTURING & TEST
QUALITY ASSURANCE

LEVEL OF EFFORT - FY '70 - - - CONTRACT SUMMARY

HOURS

	J	A	S	O	N	D	J	F	M	A	M	J
PLANNED (mo)	16,335	13,680	13,225	17,193	12,131	10,018	12,484	14,547	13,245	14,849	12,016	11,939
PLANNED (cum)	16,335	30,015	43,240	60,433	72,564	82,582	95,066	109,613	122,858	137,707	149,723	161,662
ACTUAL (mo)	11,806	10,848	13,199	22,216	14,655	13,330	15,822	12,636	10,497	14,196	10,989	
ACTUAL (cum)	11,806	22,654	35,853	58,069	72,724	86,054	101,876	114,512	125,009	139,205	150,194	

DOLLARS (000) (pr100/cost-fee)

	J	A	S	O	N	D	J	F	M	A	M	J
PLANNED (mo)												
PLANNED (cum)												
ACTUAL (mo)												
ACTUAL (cum)												

TOP SECRET/C

~~TOP SECRET/C~~

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ADMINISTRATION & CONTROLS

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QUALITY ASSURANCE

LEVEL OF EFFORT - FY '70 - - - CONTRACT SUMMARY

HOURS

	J	A	S	O	N	D	J	F	M	A	M	J
PLANNED (mo) -	2,815	2,972	2,834	3,503	2,533	2,252	2,805	3,420	3,312	3,775	3,015	3,092
PLANNED (cum) -	2,815	5,787	8,621	12,124	14,657	16,909	19,714	23,134	26,446	30,221	33,236	36,328
ACTUAL (mo) -	2,334	2,315	2,722	4,088	3,191	2,701	3,817	3,247	2,615	3,191	2,401	
ACTUAL (cum) -	2,334	4,649	7,371	11,459	14,650	17,351	21,168	24,415	27,030	30,221	32,622	

DOLLARS (000) (price/cost-fee)

	J	A	S	O	N	D	J	F	M	A	M	J
PLANNED (mo) -												
PLANNED (cum) -												
ACTUAL (mo) -												
ACTUAL (cum) -												

TOP SECRET/C

HANDLE VIA

L.O.E. DOLLARS - FY '70
TOTAL AP - SV - APC

[illegible]

LOE ESTIMATED/ACTUAL HOURS - FY 70
TOTAL AP - SV - APC

JUNE 1, 1970

