

BYE-107839-70 Copy /O of 14 10 July 1970

MEMORANDUM FOR: Director of Special Projects

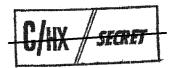
SUBJECT

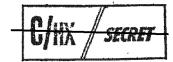
: Photo Reconnaissance Systems Report No. 48

L CORONA

A. Accomplishments

- 1. CR-12 flight preps continue for 22 July launch. Orbit is now 88 n.m. preiges vice 100 n.m.
- 2. A/P contractor O&A and engineering personnel are being moved to Bldg. 156 during the next reporting period. Training class is scheduled for 28 and 29 July.
- 3. CR-15, the first system to be transferred, will be moved during the week beginning 20 July. CR-12 "back up" system is planned to be moved after Mission IIII orbit is satisfactorily achieved.
- 4. H-timer inputs for CORONA Mission IIII will not be transmitted from Bldg. 156 to VAFB until Sunday, 12 July due to extensive program editing requirements of the SOC. The Sunday date represents the latest possible shipping date consistent with the scheduled H-timer installation of Friday, 17 July.
- 5. Version 18.6 of the 360 operating system has been generated and partially tested. This system will be available for limited use beginning 13 July. It will not be used for Mission IIII.
- 6. Filters were received from the vendor and tests will continue.





B. Future Activities

- 1. Mission IIII payload readiness review at A/P on 15 July.
- 2. R-6 and R-1 system readiness reviews at VAFB on 14 and 21 July, respectively.
 - 3. Mission IIII (CR-12) launch 22 July 1970.

C. Projected Status

- 1. CR-12. Flight preparations and shipment to VAFB on 16 July.
- 2. CR-13. Storage preps.
- 3. QR-2. Pre-storage preps.
- 4. CR-14. Pre-storage preps.
- 5. CR-15. Temporary storage.

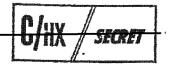
II. HEXAGON

A. General

h. Messrs. Patterson and met with Mr. Maguire and others at P.E. to analyze the impact of the P-1 problems on the program schedule. Alternatives are being explored to minimize the effect on a 17 December launch schedule. Mr. Patterson will discuss his findings and conclusions with General King and Coh. Buzard next week.

2. A portion of FACI was held at P.E. on 7 August 1970 to define the baseline configuration. The significant open items are:

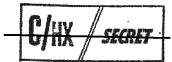
BYE-107839-70 Page Two

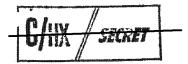




- a. The configuration presented for FACI (P-1) is not satisfactory as it does not meet the requirements of the Performance Specification. Those ECO's necessary to upgrade the performance to the required level must be submitted as part of the baseline configuration.
- b. The Quality Control Dep't. had not certified compliance with the ICD's.
- c. The data presented in support of the claim that P-1 had successfully completed the assurance vibration test was inadequate. A more detailed analyses is required. Ability of the system to transport film after exposure to a vibration environment was not demonstrated. This capability must be demonstrated on SDV-II after the qual acoustic test.
- 3. Tests and analysis to identify the problem, and cure, for the large Metering Capstan error, are continuing at P.E. The source of the problem has not yet been identified but it has been found that changes to certain servo gains alleviate the problem. These "tweaks" to the system will not be accepted by the Project Office until the basic problem is identified and/or the "tweaks" can be shown to have no other effect on the system.
- 4. The cause of the low core pressure problem at EK which has been reported for the last two weeks is still undetermined. Kodak's investigation and testing led them to recommend to the Project Office that the builder roller pressure be increased from 13 to the neighborhood of 30 lbs., which will put the core pressure back in the 400 psi range. In addition, they proposed to wind a 50,000 ft. pilot roll onto instrumented cores prior to winding future large rolls. Extrapolation of this pilot winding should indicate any winding anomalies.

BYE-107839-70 Page Three





Both the Project Office and P.E. have concurred with EK's proposal. There is yet no explanation why the core pressures dropped from the 400 psi to the 100 psi regime.

5. A mechanical problem on the spooling maching has delayed winding the 66.6 inch film roll for the caging deletion studies by P.E. It now appears that the roll will be delivered on 14 July vs 13 July. This is not expected to impact P.E. is study.

There were two pilot roll windings run at the previously mentioned winding parameters and these rolls showed 390 and 400 psi. EK will increase the builder roller pressure to 35 psi for the next pilot roll winding in order to get the pressure over the 400 psi mark.

B. Program

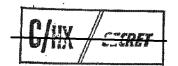
Mr. David Noon reported to Headquarters on 6 July and has been receiving normal EOD processing. He has been briefed technically by the "H" staff members and will report on 13 July to at SSC.

C. Flight Article #1

- 1. At the start of the 47°F Chamber "A" test on 7 July 1970, the "A" Camera failed catastrophically. The vehicle has been removed from the chamber and is being inspected. The cause of the failure has not been identified. The following has been identified:
 - a. A film tear occurred. The leader has been dethreaded.
 - b. The platen went through the stops and locked in a fixed position. This apparently occurred at the Start of the 47°F run. A peice of film is in the platen.
 - c. The condition of the rollers in the film path has not yet been established. It is not known whether an overtension condition occurred.

BYE-107839-70 Page Four

C/HX SECRET



- d. At best, some rework of the fine film path will be required. At worst, the two camera assembly may be removed and replaced with the P-2 two camera assembly.
 - e. The supply will be reloaded with a new film stack.
- 2. The schedule cannot be assessed until the following are identified:
 - a. The extent of the damage and the length of time required for repairs.
 - b. The cause of the failure and the length of time required to implement corrective action.

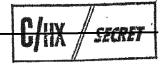
D. Flight Article #2

Smear tests which were scheduled for 7 and 8 July were not conducted due to extending the metering capstan tests and a problem with the air bar on the "A" side twister. P.E. will attempt to run the smear tests on 10 July unless a decision is made to use P-2's TCA or platens in P-1. This decision is expected late 10 July.

E. Flight Article #3

- 1. Two camera assembly buildup and testing is continuing. The test program is being modified to allow completion of about half of the Ready Room B tests in the clean room. This will allow detection of problems early in the program and should reduce the Ready Room B test time.
- 2. The platens will be dynamically tested in the clean room. They are still the pacers in TCA buildup and will be available for system incorporation the end of July. The metering capstans are the pacing items with the platens.
- 3. P.E. is currently predicting a ship date of 24 November vs 16 November because the midsection was not released to P.E. until 25 June vs a scheduled 18 June date.

BYE-107839-70 Page Five



pment Model

1. SDV-III - The electrical isolation problem previously reorted has been resolved as follows:

- a. A replacement PDS has been received and installed.
- b. The EMI filter (which was the source of the low impedance in TU No. 3) has been by-passed.
- c. The cannister electronics for TU No. 2 which was the source of the low impedance in TU No. 3 was shipped to RCA. This TU has been disconnected from the vehicle.
- 2. The payload creep test was run on 9 July and preliminary data analysis indicates success.
- 3. The vertical baseline test is scheduled to being during the afternoon of 9 July.
- 4. A working meeting with WCPO, SSC/WCFO and TRW revealed that SSC must revalidate the SS operational constraints input to the HSSOP software.

III. Meetings Requiring Participation of Headquarters Personnel

Date	Subject	Attendees
P.E.		
14 July	Qual Program Status Review	
14-16 July	Rest Procedures Review	
16 July	Radinc Review	

BYE-107839-70 Page Six

C/XX / SECRET

CHIX SECRET

SUBJECT: Photo Reconnaissance Systems Report No. 48

Date	Subject	Attendees	
	·		
14 July	AGE Spares Provisioning Conf.		
15-16 July	Integrated Logistics Plan		
WCPO			
13-14 July	MACFACT Discussions	Burks	
14 July	DM Status Review	Patterson	
VAFB			
15 July	R-7 Meeting	Patterson	
Headquarters			
16 July	Review TCA Qual Vibration Data		

Donald W. Patterson D/PRS/CSP

> BYE-107839-70 Page Seven

C/HX / SECRET



Distribution:

Cy 1-D/OSP

Cy 2 - DD/OSP

Cy 3 - D/PRS/OSP

Cy 4 - EO/OSP

Cy 5 - C/D&AD/OSP

Cy 6 - CB/OSP

Cy 7 - C/PAD/OSP

Cy 8 - C/8B/OSP

Cy 9 - C/SS/OSP Cy 10 - RB/OSP

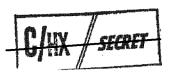
Cy 11 - PRS/File

Cy 12 - PRS/Chrono

Cy 13 -

Cy 14 -

BYE-107839-70 Page Seven EIGHT



CHX SECRET

BYE-107900-70 Copy /O of 14 17 July 1970

MEMORANDUM FOR: Director of Special Projects

SUBJECT

: Photo Reconnaissance Systems Report No. 49

I. CORONA

A. Accomplishments

- 1. The CR-12 payload for Mission ill1 completed flight preps at A/P this week with a readiness review on 15 July. The system was shipped to VAFB early on 16 July, and the R-6 review was completed the same day. Mate is planned for 18 July, and the R-1 review will be held on 21 July for the scheduled launch on 22 July 1970.
- 2. The A/P commo was removed from the SOCOMM net on 14 July. This is preparatory to Univac 1004 removal and planned deactivation of the commo center on 7 August. In the interim, normal cable traffic can be handled via TWX facility A/P to Headquarters only line. The 1004 is ready for removal.
- 3. The component test box is assembled and undergoing functional test.
- 4. The A/P contractor personnel moved to Bldg. 156 on Il July. WCPO and staff will move to Bldg. 156, and most contractor personnel will transfer to Bldg. 152 on 18 July. The collimator springs have been disassembled and forwarded to Bldg. 152.

B. Problems

All filters have been delivered, and tests are still in progress.

CHIX SECRET

C. Projected Status

- 1. CR-12. Flight operations.
- 2. CR-13. Storage (another block test is scheduled for Sept.).
- 3. OR-2. Storage (back-up system for 22 July launch).
- 4. CR-14. Storage.
- 5. <u>CR-15</u>. Storage.

II. HEXAGON

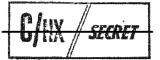
A. General

l. In order to avoid confusion in referring to the different sensor models, P.E. has begun referring to the serial numbers as follows:

Old Designation	Serial Number	Isaunch No.	
Development Model	. S/N 01		
P-1	8/N'02	5V-2	
P-2	8/N 03	8V-1	
Etc.	Etc.	Etc.	

2. EK has been unsuccessful in determining why there has been a step change in the core pressure (down from 400 psi nominal to 60-95 psi) while winding with the same procedures. The schedule for conducting the tests necessary for deletion of the supply caging mechanisms on flights P-7 and up was being jeopardized because of this problem. To allow this test program to proceed, it was agreed to apool

BYE-107900-70 Page Two



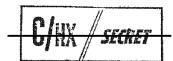
C/HX / Sécret

SUBJECT: Photo Reconnaissance Systems Report No. 49

the test roll with increased builder roller force and film tension (30 lb/7 psi vice 13 lb/5 psi). This resulted in a core pressure which was lower than desired (275 vice 400 psi). A high risk approach will be taken to maintain schedule by testing the lower pressure film stack.

- 3. The P-1 film stack was found to have been degraded when removed from the chamber. A possible cause was the decreased temperature combined with a possible low core pressure. A test program will be initiated immediately to determine the core pressure/temperature relation which will maintain stack integrity.
- 4. SSC guidelines for a proposed revision to the Qualification Test Program have been reviewed. SSC is still deficient in establishing pass-fail criteria compatible with Headquarters' position. Deficiencies were also noted relative to the film flatness test as well as a plan for requalifying items which incorporate design or vendor changes subsequent to formal qualification. An appropriate response has been forwarded to SSC.
- 5. The status of the qualification test program was reviewed with SSC this week. Some progress is being made; however, electronics appear to be lagging. Only four boxes have been approved by SSC as qualified. Eight additional boxes have been qual tested by the two vendors, but SSC has yet to approve the data packages. Ten more boxes have been qual tested at the vendor facility, but no data packages are available to SSC. The remaining ten boxes have yet to successfully pass qual testing, including the 2Al box which failed qual on P-1 in Chamber "A".
- 6. A formal SSC version of the Headquarters/SSC-derived midsection CEI specification (which had previously been negotiated) has been received and is being reviewed for accuracy and compatibility. The document is of primary importance to acceptance test control.

BYE-107900-70 Page Three



- 7. SETS personnel visited the WCPO on 16 and 17 July for integration of the latest MACFACT modifications and program checkout.
- 8. The FIDAP Program to be used for analysis of microdensitometer and microcomparator readings was satisfactorily tested on the IBM 360/65 in Building 156. The program source deck, test data, and sample output will be sent to Hqs., Danbury, and Westover on approximately 24 July.

III. Model Status

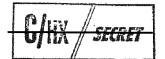
A. Development Model (SDV-III)

The SV vertical baseline test was successfully completed the evening of 10 July, and the engineering buy-off for the vertical test was held on 15 July. At the pre-test (for the horizontal baseline/EMC) meeting which was also held on 15 July, it was decided to change the test sequence for SDV-III. The next test will be the acoustic followed by the horizontal/EMC tests. The reason for the change is due to the late arrival of the SSC OB encoder replacement. The repaired A-2 cannister electronics is due in today from RCA and will be replaced into the forward section.

B. SV-1 (S/N 003)

1. The midsection will be run in front of Chamber "A" instead of in Ready Room "A". This past week was spent checking the SSTC interface, the take-up in the forward section simulator, the supply, and other subassemblies. A slow turn-on of the camera should occur on 17 July. The schedule calls for MFN 3.05 (the assurance horizontal baseline) to be complete on 27 July.

BYE-107900-70 Page Four



2. Preparations continue for the buildup of the forward section. Modifications of the 4 RVTS to accommodate a stereo rewind requirement are in progress. Final checkout of the CTI cable tester is underway. Partial R&I of two forward section articulators (one active, one passive) has revealed manufacturing discrepancies. Further checkout of these components has been halted pending Daabury direction.

C. SV-2 (5/N 002)

The midsection will be tested in Ready Room "A". Both platens have been removed and are being reworked. The "B" optical bar is being removed and will be tested in Chamber "D".

IV. Meetings Requiring Participation of Headquarters Personnel

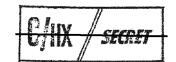
Car Linear

Date	Subject	VKerdees	
HQS	y y so what is a second of the	dicherine . S	
21 July	Schedule Review	Staff	
P.E.			
Zl July	Improvement Studies		
22 July	Technical Working Session		
***	Tilm Charle Veraliana		
23 July	Film Stack Problems		
23 July	Qual Test Program		
VAFB	•		
21 July	R-1 Meeting		
STC			
22 July	CR-12 Launch		

G/IIX SECRET

BYE-107900-70 Page Five

14 00040684D



BYE-107902-70 Copy <u>fc</u> of 14 24 July 1970

MEMORANDUM FOR: Director of Special Projects

SUBJECT

: Photo Reconnaissance Systems Report No. 50

L CORONA

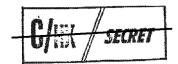
A. Accomplishments

1. Mission Illi (CR-12) receiving inspection and mate at VAFB were successfully accomplished by 18 July. The mission was successfully launched 22 July. The system is operating satisfactorily.

2. Move.

- a. All WCPO personnel are now located in Bldg. 156. Several test personnel remain at A/P, primarily to accomplish CR-12's payload retrieval. Except for these test personnel and some administrative personnel who are completing "close-out" of A/P, the WCPO is now located in either 156 or 152. Bldg. 152 was accepted for use by LMSC on 21 July.
- b. Shaker acceptance tests are being conducted. SRV associated test gear is being installed and calibrated.
- c. The first system, CR-15, was moved to Bldg. 152 on 23 July.
- 3. The A/P 1004 data equipment will be moved during the next reporting period.
- 4. The Itek West Coast Division component test box has been tested and is now in use.

C/IIX / SECRET



B. Problems

- 1. Ripple filter test results indicate several questionable filters. Replacements will be manufactured locally since the vendor is bank-rupt. Availability forecast is approximately three weeks. There is no impact on COROMA Systems availability.
- 2. Several dual data signal conditioners (DDSC's) have shown susceptibility to pulse slopes resulting in double pulses or none at all. Reevaluation is being conducted and preliminary analysis indicates a transistor change may be required. This problem does not impact CR-13 or QR-2.

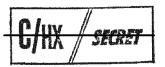
C. Future Activities

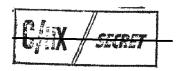
Mission IIII PET is tentatively scheduled 25 and 26 August.

D. Projected Status

- 1. CR-12. Flight Operations.
- 2. CR-13. Storage (still needs block test).
- 3. QR-2. Storage (current backup system).
- 4. CR-14. Storage.
- 5. CR-15. Training class use.
- 6. CR-16. Storage at Itek West Coast Division.
- 7. CR-8. Final acceptance tests. "Buy off" dates 10 12 August.

BYE-107902-70 Page Two





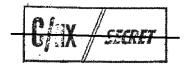
II. <u>HEXAGON</u>

A. General

- 1. A preliminary copy of the SSC requalification plan was informally reviewed this week. The plan has not been fully coordinated nor approved by SSC management, but appears to reflect normal SSC test philosophy. It is general in nature but does constitute the first effort toward establishing policy and responsibilities relative to requalification of AVE material. The plan will be released as a separate document, but will be reviewed by Headquarters and related to the forthcoming revised Qualification Test Program.
- 2. SSC is placing more emphasis on completion of the qualification testing through personnel changes and more attention by higher management. At a Qualification Program working meeting (Headquarters/SSC) this week, it was agreed that SSC would conduct qualification certification meetings for those contractually required compartment electronics boxes but would provide reports (and appropriate discussions or meetings) relative to the other electronic boxes. SSC (through subcontracts management) has increased the emphasis on the vendors, especially PE Aerospace, to expedite qual test and reporting. SSC will make available to Headquarters the preliminary qual test reports as they are received from the vendor.
- 3. The SSPO met with SP-7 on Tuesday afternoon, 21 July, at the STC to discuss space and equipment for nn-orbit HEXAGON support. Satisfactory agreement was reached on SSPO space and necessary equipment for the support at the STC.
 - 4. The security alarms for the computer facility are now in use.
- 5. The computer facility technical staff has written a software module designed to enable fortran coders to sort one or more data sets one or more times within the same job step.
- 6. Version 18.6 of the operating system testing is progressing at a satisfactory rate, with minor errors which are being corrected.

BYE-107902-70 Page Three

C/iix / secret



- 7. P.E. is formulating a position of the use of the Development Model take-ups after the DM completes its testing. It is expected that DM-2 and 3 should be used for R&I on the West Coast (one will be a spare), DM-4 will go to Eastman Kodak as the Operational Readiness Inspection Unit. After this, DM-4 will probably go back for any possible future testing with the DM.
- 8. Final checkout is underway on the SSTC Kluge box which will allow three commands to be executed from the SSTC rather than the present manual switching. These are the supply fill valve off and on, pneumatics A and B side independent of off and on, and the in-flight changeable filter. The boxes are in SSTC's 1 and 2 now. SSTC #5 is being retrofitted at AC during August with scheduled delivery to VAFB on 1 September 1970. SSTC #2 will be retrofitted, vice the Kluge box, as soon as the SSC schedule permits. SSTC no's. 3 and 4 will also receive the same retrofit.
- 9. The previously reported problems with film spool structural integrity; uncertainties in the core pressure, side side gradients of core pressure, and temperature effects on the interlayer pressure continue to impact the program. These problems were addressed at P.E. with EK on 23 July. The conclusions of that meeting are:
 - a. EK is to engage in a high priority effort to develop a method of measuring the core pressure of each roll of film. A prime candidate is the gage previously developed by Larry Smith of SETS.
 - b. The large diameter film spool (270 psi core pressure) which was to be used for the supply caging deletion tests will be used for a temperature test instead. This will affect both the schedule for the caging deletion tests and the film flatness tests P.E. is conducting in the 10° X 12° chamber. Both of these effects are acceptable, and the caging problem can be worked around.
 - c. EK will manufacture a new large diameter spool (desirable core pressure is 400 psi) within 10 days.

BYE-107902-70 Page Four

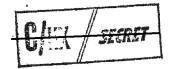
C/HX SECRET



- d. The two full size SO-280 film spools dedicated to the SDV-III pad test sequence will be shipped to EK for rewinding to a higher core pressure and then shipped back to the West Coast. These rolls will be installed in SDV-III prior to the Chamber "A"!" test. This is necessary as the two rolls now in SDV-III may have a low core pressure and should not be exposed to a low temperature.
- 10. The film problems have a possible impact on the Chamber "A" testing of S/N 03 (SV-1). The film stacks presently in this model are suspect, as they were spooled during the period when EK was producing low core pressure. The options open to PRS are:
 - a. Continue with the present film and accept the risk that mistracking may occur during the 47°F test.
 - b. Install the two rewound rolls of 1414 on the 5/N 02 supply hub and install this stack in the S/N 03 midsection prior to entering the chamber.
 - c. Hold the two rewound rolls and install in the S/N 03 supply after completion of the MFN 3.09 run. Options b and c have an estimated schedule impact of seven days (P.E. will probably claim more) while option a could cause a delay of from zero up to two weeks. The decision on this will be reported at the Monthly Program Review.
- 11. A review of the Design Improvement Studies was held at P.E. on 21 July. Highlights are:
 - a. A failure mode count shows that of 7470 possible critical failure modes, the present ESD will not protect the system from 1670, the improved ESD will not protect for 805, and the improved ESD with early warning detector wilb reduce the number of nonrecoverable modes to 570. The feasibility study is scheduled for completion next month.

BYE-107902-70 Page Five

C/HX / SECRET

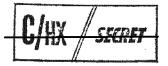


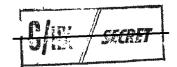
- b. The brush motor study is essentially complete. Conversion of all motors to the brush type and replacement of encoders with tachometers except for the platen, O.B., and metering capstan will result in a 3.1% increase in system reliability.
- c. The engineering model of the in-flight changeable filter has been completed and qualification testing will commence.
- d. The dimensions of the mechanical super looper have been established for a 250 foot capacity. This footage will give the capability to start-stop at will and change scan between frames. P.E. will continue this study on the assumption that the control scheme is based upon coarse film path accelerations during photography. This provides the most flexible operational concept and does not dilute their limited efforts by continuing to look at other schemes.

The slack box studies are progressing slowly, and the control scheme analysis has not yet begun.

- e. The caging deletion breadboard test has been delayed because of the other film problems. The result will be that a core will have to be redesigned (additionsof side plates) before the results of the breadboard test are in.
- 12. A review of the current system problems was held at P.E. on 22 July. The cause of the fixed in-track smean ("bias") has not been positively identified. Other bars have not been found to have this problem and the obvious contributors have been checked. In all probability, this bar did not have a proper pin to glass alignment during the manufacturing cycle even though the records show this alignment to have been signed off by Ω . C.

BYE-107902-70 Page Six



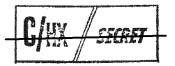


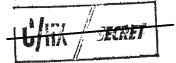
The variable in-track smear is explainable in terms of gravity effects on the optical elements on the O.B. P.E. is to check the S/N 02 bar which had this effect and correlate the smear as measured on film with the measured mirror deflection. Further testing on the mirror mounts is required in order to define a fix, if any (this effect will not be seen on orbit).

There is a high probability that the twice-per-revolution metering capstan error is being caused by large eccentricities or rollers in the fine film path. P.E. has been running bench tests with a metering capstan in a flight platen. The twice-per-revolution error is not present when the metering capstan does not have a film load. When the fine tension sensor rollers were by-passed, the twice-per-revolution error was sliminated. It has been determined that the fine tension sensor rollers were specified to have an eccentricity less than 100 millionths, but, in fact, have an eccentricity of 150 to 250 millionths. When a fine tension sensor roller with an eccentricity of 60 millionths was installed in the bench test setup, the error was reduced. The question of whether out-of-spec eccentricities of idler rollers in the fine path may be adding to the problem is now being addressed.

- 13. P.E. presented a failure analysis of the P-1 failure to the Project Office on 22 July. As reported last week, the failure was caused by a documentation error at Radiation which resulted in a wrong value resistor being used in the platen recycle mode (2A1) electronics box. The wrong resistor value had no effect on operation at room temperature. However, at low temperature, the circuit was not able to operate with the wrong value resistor.
- 14. A discussion was held with M. Maguire regarding delivery requirements for systems I through 6. Maguire stated that in his interpretation of the delivery requirements of the Contract was that delivery should be in accordance with the specific dates specified in the

BYE-107902-70 Page Seven





SUBJECT: Photo Reconnaissance Systems Report No. 50

appendix to Amendment 7. It is the Government's position that the delivery dates are in accordance with the delivery adjustments indicated in the Incentive Fee Plan which salled for the adjustment of delivery schedules of succeeding units in specific intervals of time following the delivery of the preceding unit. Under Maguire's proposed delivery schedule, approximately five months would occur between the delivery of unit 6 and the follow-on unit 7. To adjust this schedule to avoid the cost of such a large gap would be in excess of \$3 million on which P.E. would request fee. Under the Government's position, the present contract schedule is consistent with the October delivery of unit 7 under the follow-on contract. The Government's position was that there is no need to modify the schedule at this time. Maguire is expected to make a reclama on this decision.

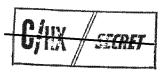
15. An estimate of the cost of manning up to operate a 7-day, 24-hour-day test program at the Integrating Contractors' plant from September through December was prepared by the WCPO. This plan was prepared to conform with the SPO office direction to their contractors to man up for a maximum effort in an attempt to hold the 17 December launch date. Implementation of this plan will be contingent upon the schedule review by the D/NRO next week and the availability of funds to support additional personnel. The cost of such augmentation for SSC has been estimated at \$240,000.

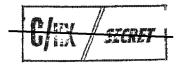
III. Model Status

A. SDV-III

During the past week the vehicle has been undergoing acoustic preps in the vertical integration stand (VIS). The EMI filter has been removed from TU 2A, and the AZ electronics has been installed in TU 3B. The detailed planning schedule calls for moving to the acoustic chamber on 25 July with a pre-acoustic check run on 27-28 July and the acoustic acceptance and qual test on 30 July.

BYE-107902-70 Page Eight





B. SV-1 (S/N 03)

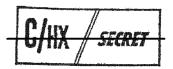
Midsection - MFN 3.09 has begun. The power consumption portion has been completed. This is the system checkout prior to Chamber "A" testing. We appear to be one day ahead of schedule (to a 1 September shipment date) however, the "B" side platen has hit its stope (gently) intermittently. This problem, which only occurs when both cameras are operating, is being thoroughly investigated today. An EMI problem in the 2Al box is suspected. Both 2Al boxes are scheduled for replacement anyway, because of a Radinc error in the as-built parts list - an incorrect resistor was used. The boxes for S/N 03 are scheduled to arrive at P.E. on 28 July and 3 August. Their replacement plus the installation of the platen stop switches will undoubtedly consume the plus one day mentioned above.

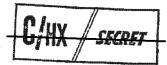
Forward Section - Preparations for P-1 forward section buildup continue. Replacement of two defective rollers in RV no. 2 TUA has been accomplished. Checkout of AVE electrical cables and articulator R&I are in progress. Necessary rework of active articulator tray began on 23 July.

C. SV-2 (5/N 02)

Rework of the supply, Optical Bar "B", film drives, crossovers, and Looper "A" are proceeding well. Platen rebuild and specifically the metering capstan is the critical path. A number of fine tension sensor rollers are being hand carried to Speedring (vendor) saw rework. Speedring has indicated that they can reduce the eccentricity to acceptable limits within 24 to 48 hours. As a result, the platens are probably two to three days late to the rework schedule.

BYE-107902-70 Page Nine





IV. Meetings Requiring Participation of Headquarters Personnel

Date	Subject	Attendees
SAMSO		
27-29 July	Schedule Discussions with Gen. King, Dr. McLucas and Dr. Naka	Patterson
WCPO		
29 July	QA/QC Procedures and Documentation	
30 July	Test Plan & Procedure Documentation	
31 July	Technical Certification Status of AGE	
P.E.	•	
29 July	Reliability & LOL Determination	
EK		·
30 July	Core Pressure & Spooling Tech- niques	Patterson,
HQE		
29 July	Near-Real-Time Concepts	Patterson,

PMO/PRS/OSP

BYE-107902-70 Page Ten

C/HX SECRET

SAIX SECRET

SUBJECT: Photo Reconnaissance Systems Report No. 50

Distribution:

Cy 1 - D/OSP

Cy 2- DD/06P

Cy 3 - D/PRS/OSP

Cy 4 - EO/OSP

Cy 5- C/D&AD/OSP

Cy 6 - CB/CSP

Cy 7 - C/PAD/OSP

Cy 8 - C/SB/OSP

Cy 9 - C/SS/OSP

Cy 10 - RB/CSP

Cy 11 - PRS/File

Cy 12 - PRS/Chrono

Cy 13 -

Cy 14 -

BYE-107902-70 Page Eleven

