

BYE-107900-70

Copy 10 of 14

17 July 1970

MEMORANDUM FOR: Director of Special Projects

SUBJECT : Photo Reconnaissance Systems Report No. 49

I. CORONAA. Accomplishments

1. The CR-12 payload for Mission 1111 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 R46 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 11 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.

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C. Projected Status

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

II. HEXAGON

A. General

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

<u>Old Designation</u>	<u>Serial Number</u>	<u>Launch No.</u>
Development Model	S/N 01	----
P-1	S/N 02	SV-2
P-2	S/N 03	SV-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 spool

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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.

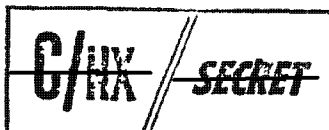
3. The P-1 film stack was found to have been degraded when removed from the chamber. A possible cause was the decreased temperature combined with a possible low core pressure. A test program will be initiated immediately to determine the core pressure/temperature relation which will maintain stack integrity.

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 2A1 box which failed qual on P-1 in Chamber "A".

6. A formal SSC version of the Headquarters/SSC-derived mid-section 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.

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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.

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2. Preparations continue for the build-up 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 Danbury direction.

C. SV-2 (S/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

<u>Date</u>	<u>Subject</u>	<u>Attendees</u>
<u>HQS</u>		
21 July	Schedule Review	Staff
<u>P.E.</u>		
21 July	Improvement Studies	
22 July	Technical Working Session	
23 July	Film Stack Problems	
23 July	Qual Test Program	
<u>VAFB</u>		
21 July	R-1 Meeting	
<u>STC</u>		
22 July	CR-12 Launch	

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AD/PRS/OSP**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/SB/OSP
Cy 9 - C/SS/OSP
Cy 10 - RB/OSP
Cy 11 - PRS/File
Cy 12 - PRS/Chrono
Cy 13 -
Cy 14 -

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