

BYE-108405-70  
Copy 10 of 14  
25 September 1970

MEMORANDUM FOR: Director of Special Projects

SUBJECT : Photo Reconnaissance Systems Report No. 59

I. CORONA

A. Accomplishments

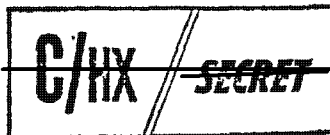
1. The changes to the DISIC PMU are in work.
2. A review of the DISIC film flatness indicated unacceptable results. The unit is being repaired and another test will be conducted. Another unit is being prepared concurrently for the next mission.

B. Problems

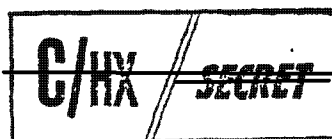
1. The results of block tests on CR-14 indicate that the previously reported collimator problem may not exist. CR-13 will be returned to the collimator for a retest to confirm this. The evaluation of data from CR-13 and CR-14 is continuing.
2. The failure analysis of the Autronics 4 channel timer is continuing.

C. Future Activities

1. Acceptance of CR-8 SRV's at G.E. on 27 October.
2. Mission 1112 launch on 18 November.



HANDLE VIA BYEMAN  
CONTROL SYSTEM ONLY



**SUBJECT: Photo Reconnaissance Systems Report No. 59**

**D. Projected Status**

1. CR-13. Post block review.
2. QR-2. Backup.
3. CR-14. Block test.
4. CR-15. Pre-HIVOS.
5. CR-16. Acceptance test.
6. CR-8. Storage.

**II. HEXAGON**

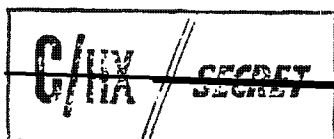
**A. General**

1. The A/P software personnel have been requested to develop a HEXAGON Exposure Ephemeris Program (HEEP) for operational use by SSC and WCPO personnel at the SCF. The work is being done on a non-interference basis with CORONA support. Anticipated completion date is 1 November.

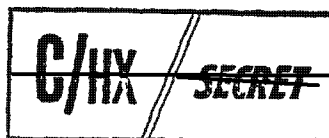
2. SSC/WCFO personnel have made several modifications to MACFACT required for operational usage.

3. As an action item from the September Operations IFWG, the engineering operation for the first flight are being defined with SSC participation. Creep operation and health checks have been defined.

BYE-108405-70  
Page Two



HANDLE VIA BYEMAN  
CONTROL SYSTEM ONLY



**SUBJECT: Photo Reconnaissance Systems Report No. 59**

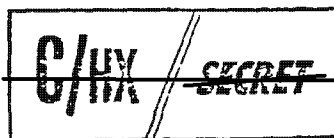
3. A team of SPO, Aerospace, and LMSC personnel was invited to investigate the problems with film tracking and platen and metering capstan performance. The team was not able to identify discreet causes for the problems but weaknesses in the development program, both experimental and analytic, were identified. Specifics will be presented at the Monday Staff Meeting and a written report will be delivered to D/OSP by 2 October.

4. Perkin-Elmer representatives met with Project Office personnel on 24 September to discuss the make or buy decision for the take-ups on the follow-on contract. Although it was Perkin-Elmer's initial position to bring both the production of take-ups and take-up refurbishment in-house, Perkin-Elmer reversed its position at the strong insistence of the Government and will proceed to negotiate a follow-on subcontract with RCA. The Project Office was prepared to release a RFP for a fixed price bid from both Perkin-Elmer and RCA, in essence making the TW contractor and associate contractor but it was decided not to do this at this time but to consider this approach for the subsequent follow-on contract.

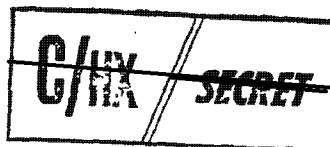
5. The question on where to procure the Type I and Type III encoders for the follow-on remains an open issue.

6. Review of the SSC revised QA Manual has been completed, and the Headquarters comments will be forwarded subsequent to final typing. Significant recommendations for inclusion in the revised Manual include (1) assurance of hardware/software compatibility, (2) definition of "corrective action" flow, (3) delineation of responsibility for establishment of records requirements, and (4) more explicit definition of the responsibilities and activities of the reliability organization. Discussions with P.E. relative to the follow-on work statement included considerations for the inclusion of the latest appropriate (Headquarters-approved) version of the QA Manual when available.

BYE-108405-70  
Page Three



HANDLE VIA BYEMAN  
CONTROL SYSTEM ONLY



SUBJECT: Photo Reconnaissance Systems Report No. 59

7. SETS representatives and WCPO reviewed the bench test box specification and work statement. Finalization of both documents is in progress.

B. Model Status

Development Model (SDV-III)

EMI tests were satisfactorily completed on 23 September. The system is now undergoing preparation for acoustic testing. The vehicle will be mated in the Vertical Integration Stand on 24 September and will be moved to the acoustic chamber on 28 September.

SV-1 (S/N 003)

Midsection

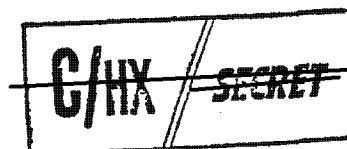
In vacuum, 70°F acceptance testing is partially complete. Testing is continuing and should be complete today. The film is being taken up in the forward section simulator take-up rather than the access lock. Therefore, the chamber will have to be repressurized to remove the film before proceeding to 47°F. There will be approximately 88,000 ft. of material per camera after the 70°F test.

Forward Section

The buildup of the SV-I forward section is temporarily held up for the completion of take-up de-orbit pin modification and the return of RV #3 from MWC. RCA personnel visited WCFO this week to perform alignment checks on film path roller assemblies.

BYE-108405-70

Page Four



HANDLE VIA BYEMAN  
CONTROL SYSTEM ONLY



SUBJECT: Photo Reconnaissance Systems Report No. 59

SV-2 (S/N 002)

Forward Section

1. Significant improvement has been made in metering capstan performance. Both metering capstans on this model have errors between .025 and .03 inches per second when measured at the platen level of assembly. When in the system, the error will increase; however, the error should be close to the 0.05 inch per second requirement.

III. ADMINISTRATIVE

A. Meetings Requiring Participation of Headquarters Personnel

<u>Date</u>	<u>Subject</u>	<u>Attendees</u>
-------------	----------------	------------------

P. E.

29 Sept	SSTC Spares & Funding Status	<input type="text"/>
---------	------------------------------	----------------------

30 Sept	Acceptance Data Review (S/N 003)	Kohler, <input type="text"/>
---------	----------------------------------	------------------------------

30 Sept	Modular Measurement Package Review	<input type="text"/>
---------	------------------------------------	----------------------

WESTOVER AFB

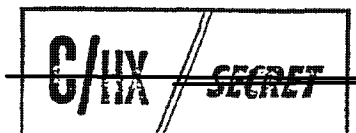
1-2 Oct	Acceptance Data Review (S/N 003)	Kohler, <input type="text"/>
---------	----------------------------------	------------------------------

HQS

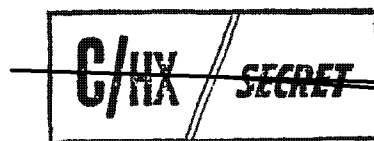
29 Sept	Cost Review	Staff
---------	-------------	-------

30 Sept	Proposal Discussions	Patterson, <input type="text"/>
---------	----------------------	---------------------------------

BYE-108405-70  
Page Five



HANDLE VIA BYEMAN  
CONTROL SYSTEM ONLY



**SUBJECT: Photo Reconnaissance Systems Report No. 59**

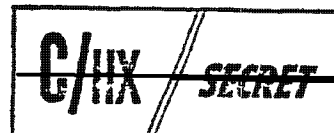
LSI

PMO/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 - CS/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 -**

**BYE-108405-70**  
**Page Six**



**HANDLE VIA BYEMAN**  
**CONTROL SYSTEM ONLY**