



BYE-110230-71
Copy 10 of 14
6 August 1971

14-00405650

MEMORANDUM FOR: Director of Special Projects

SUBJECT : Photo Reconnaissance Systems Report No. 104

I. CORONA

A. Accomplishments

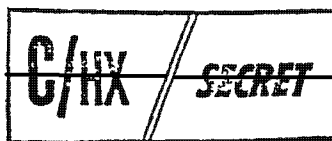
1. CR-15 (Mission 1115) was assigned an 8 September 1971 launch date. It will also be a back-up for HEXAGON Mission 1202 and either launched on assigned date or held at R-7 status for 30 days.
2. CR-16 repeat storage critique was held on 5 August 1971 with a successful conclusion.

B. Problems

1. CR-15 SRV flight programmer indicated a T/M discrepancy during recycle for flight preps. Subsequent testing showed a continuous problem and unit was replaced with a spare programmer. Preps are continuing with no problems.
2. Air conditioning system in Building 152 ceased to function due to breaking of fan blades in blower. Repair parts ordered and system refurbishment is in process. Malfunction has slight impact on CR-15 preps in instrument area, but SRV preps continue. Expeditious repair of air conditioning will result in no schedule loss.

C. Projected Status

1. CR-15 - Pre-flight preps.
2. CR-16 - R-25 and holding.
3. CR-8 - Storage preps.



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II. HEXAGON

A. Engineering

1. An electronic box qual certification meeting was held with P.E. this week. Seventeen (17) of the thirty-three (33) boxes to be considered, have been certified. Plans are to complete the review of the qual program prior to SV-2 launch.

2. Continued testing of the SO-255 color film has not been encouraging. A 2,000 foot and a 1,000 foot segment were transported in the abbreviated film path. Pneumatics pressure was 3 1/2 psi and film path pressure was .7 psi and the relative humidity of the chamber was 30%. Very little difference in powdering was detected between the two links. During transportation, the air bars were examined and noticeable powder buildup was evident on the air bars. Additionally, small emulsion streaks were noticed across the air bar which are likely to be areas of heavier buildup as more film is transported. P.E. expects to increase air bar pressure to 7 psi and continue testing.

3. The two mixed film rolls for the D-Model (including 5,000 feet of color film) were sent out to the West Coast this week with SN-005. In addition, DM 4 take-up was also sent to the West Coast from Westover in the same shipment for pyro and acoustic tests.

B. Operations and Systems Analysis

1. A meeting was held at Hqs. on Tuesday to outline a plan for comparing CRYSPER predictions with actual I201 results. The participants in the exercise were representatives from EK, SPPF, P.E., and OCS. We plan to determine the correlation between CRYSPER and:

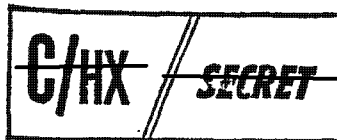
- a. VEM resolution
- b. Fixed and mobile CORN resolution readings
- c. PI ratings

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Some of the data has been gathered and the remainder will be acquired by early September. If this work indicates that a change in CRYSPER is necessary, it will be made prior to use during Mission 1202. The predictions that we will make in the SV-2 readiness report, though, will be made from CRYSPER as it exists today.

2. A meeting was held at Westover on 2-5 August to complete the review of the SN-005 retest data and finalize the Acceptance Team Report. Camera B evidenced improved resolution in the retest, probably due to the use of the proper flight filter during that test. The camera B tilt was properly implemented. The Acceptance Team Report will be published during the week of 9 August.

C. Model Status

1. SDV-III (Development Model)

Platen B has been reinstalled in the system after replacement of the slit and shutter with the format mask. The film drive and crossover assembly are now being installed. Platen A is at SSC for reinstallation of the slit and shutter mechanism. This was necessary, as will be the removal of the mask from Platen B, since the glass masks were not designed to survive an acoustic environment. The special acoustic tests, to check out a modified acceptance test configuration, are scheduled to follow the smear tests and should begin on 20 September.

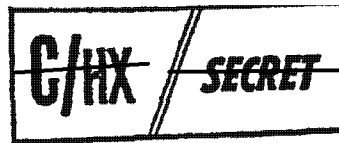
2. SV-1 (MS SN-003)

The system is now in a circular orbit of approximately 150 NM. Orbit will be adjusted to the flight orbit prior to deboost. Deboost is scheduled for rev. 839 1850Z, 6 August 1971. The OB's were operated approximately six hours over a two day period during the active solo phase. Operations up to 40 minutes per operate were performed. No problems developed. OB's will be operated again over Cook Tracking Station during last night of mission. Another attempt will be made to move the B side focal plane past the stall point. SV-1 flight critique is scheduled for 10 August 1971 at the STC.

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3. SV-2 (MS SN-002)

The evaluation sequences of the A-2 chamber test have been completed. A series of vacuum runs is currently underway to attempt to resolve a rewind tracking anomaly. The film from the A-2 test will be shipped to Westover AFB for processing and evaluation. A return date for RV's 1, 2, and 3 has not yet been established and RV 4 is currently being left in the vehicle. SBAC may wish to run additional vacuum tests to obtain more data on the aft section components.

4. SV-3 (MS SN-004)

The SV mate operation has been delayed from 11 August until 24 August so that SBAC can conduct aft section tests. SBAC problem with the arm module has contributed to the slip. However, the principle factor to the slip was SBAC's dropping the ECS system. The only other available ECS does not have the on-orbit adjust modification and the replacement date and reverification program have not been defined. Schedule for removal of the RV's for the parachute modification has not yet been defined, but it appears that the RV's will remain in place for the next 3-4 weeks. This should allow enough time to conduct system vertical and horizontal baseline tests.

5. SV-4 (MS SN-005)

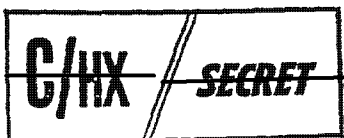
The SV-4 midsection arrived at WCPO on the evening of 4 August. Preparations are underway for the initial SBAC operations which will continue through 13 August. SSC R&I scheduled to begin on 16 August. R&I of the forward section kit is in process. Inspection of all cables is complete and inspection of the articulators is underway. SSC/WCPO is now modifying the HOPE operational system in accordance with this decision.

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6. SV-5 (MS SN-006)

The camera system has been bothered by a film drive resonance problem which hopefully has been solved. Film is to be processed on 6 August, and if the problem has cleared up, MFN 3.09 will commence immediately. P.E. is planning to have the MFN 3.09 data review next Tuesday or Wednesday (10 or 11 August).

7. SV-6 (MS SN-007)

Manufacturing buildup and test is continuing and it is planned to start loop testing next week, which is the clean room test to verify the coarse film path. P.E. expects to have the system assembled at TCA level about the first week of September.

D. West Coast Project Office

1. Following the SV-1 flight, the WCPO decided to limit HOPE program support to PFA engineering and problem solving. SSC/WCFO is now modifying the HOPE operational system in accordance with this decision.

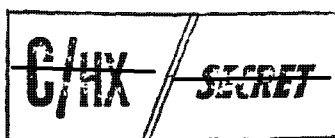
2. The HEEP Program final modifications for SV-2 are being checked out this week. The program is expected to be at SV-2 operational status NLT 13 August.

3. [redacted], Office of Security, visited this installation to discuss all aspects of handling classified data in a computer environment. The result of [redacted] findings will be a series of recommendations to be forwarded through [redacted].

4. Computer utilization for July 1971.

	<u>% of Utilization by Project</u>
C	6.24
H	62.88

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% of Utilization by Project

Probe Systems	. 36
Failure Analysis	4. 22
Utilities/OS Modification and Maintenance	8. 28
Miscellaneous	1. 56
Jobs processed	3007
CPU Meter Hours	307

III. Meetings Requiring Participation of Headquarters Personnel

<u>Date</u>	<u>Subject</u>	<u>Attendees</u>
<u>Westover AFB</u>		
9-13 August	SV-2 Chamber A-2 Evaluation	[] Kohler, []
10 August	PFA Meeting	[] Kohler, [] []
<u>New York City</u>		
9-13 August	Computer Conference	[]

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<u>Date</u>	<u>Subject</u>	<u>Attendees</u>
<u>SETS</u>		
10 August	Block II Discussions	<input type="text"/> Patterson
10 August (AM)	HEXAGON Program Discussions	Patterson, <input type="text"/>
<u>SAMSO</u>		
10 Aug	HEXAGON Program Discussions	Patterson, <input type="text"/>
<u>LMSC</u>		
9-11 August	RV IFWG	<input type="text"/>
<u>WCPO</u>		
10 August	Review "D" Model Test Plan	<input type="text"/>
11 August	Multiple RV Configuration Discussions	<input type="text"/>
11-12 August	HEXAGON/CORONA Discussions	Patterson, <input type="text"/>
<input type="text"/>		
10 August	Discuss Spares Work Statement	<input type="text"/>

DONALD W. PATTERSON
D/PRS/OSP

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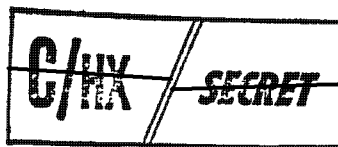


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