

BYE-109325-70  
Copy 10 of 14  
11 December 1970

MEMORANDUM FOR: Director of Special Projects

SUBJECT : Photo Reconnaissance Systems Report No. 70

I. CORONA

A. Accomplishments

QR-2 (Mission 1112) "B" recovery was accomplished on 7 December 1970 at 2224Z (on board), Rev 309.

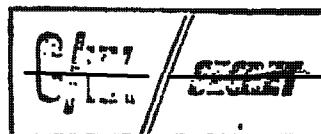
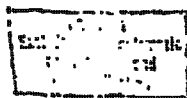
B. Problems

1. Mission 1112 material and data recovered from "A" and "B" is under analysis for cause of No. 2 instrument and DISIC failure.

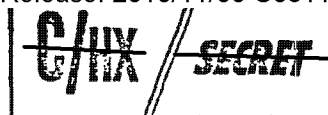
2. CR-15 slope programmer failure analysis is continuing. Preliminary indications are that an incorrect solvent used in the cleaning of the bearings caused drying out of the lubricants in the vendor motor mod.

C. Projected Schedule

1. CR-13 Pre-storage.
2. CR-14 Storage, R-25 status.
3. CR-15 Pre-storage.
4. CR-16 Environmental preps.
5. CR-8 Instrument acceptance.



HANDLE VIA BYEMAN  
CONTROL SYSTEM ONLY



SUBJECT: Photo Reconnaissance Systems Report No. 70

## II. HEXAGON

### A. General

1. The HEXAGON Exposure and Ephemeris Program is in final checkout by LMSC personnel assigned to the effort. Final modifications to this software for obtaining "TUNITY" slit-bias inputs (for snow) are intended to support the CPX planned for 15 through 18 December.

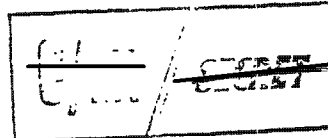
2. An Orbital Operations Policy Subgroup (OOPS) meeting was held on 9 December in which three policies were established: (a) redundant station contact sequences are permissible if PMU capacity remains after operational sequences are generated; (b) generation of SS operations will utilize an ephemeris no older than three previous revs; (c) use of SPC inhibit is restricted to those specified in the flight profile and those agreed to by the SPO.

3. An Operations Interface Work Group meeting was held on 10 December.

a. The TMWG reported that correctors are available for correction of the flight-limiting problem concerning processing of telemetry from the station disc. Telemetry processing modes are in good shape except for the modes processing SS dynamic data. The thermal/vacuum telemetry tape supplied by LMSC/PE to the FTFD for rehearsal purposes will not be used because Aerospace (without coordinating with PE and apparently, with LMSC) stated that the tape was not adequate.

BYE-109325-70

Page Two



~~C/IX~~ ~~SECRET~~

**SUBJECT: Photo Reconnaissance Systems Report No. 70**

b. LMSC has prepared an ICD covering the sharing of telemetry tapes. (Ed Smathers advised after the Operations IWG meeting that the SPO had not concurred with this procedure for the sharing of telemetry tapes.)

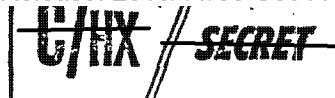
c. SSPO attempted to identify the data (computer listings, LMSC TR log, schedules, etc.) required by SSPO and PE for support of operations, but the SPO decided that this subject would be discussed between SPO and SSPO after the meeting.

4. A review of the updated Forward Assembly Kit (FAK) FACI data was conducted at PE on 9 December to expedite completion of the FACI of the Kit. Modification of the FAK CEI specification to include (or reference) additional specific acceptance tests and to incorporate the latest configuration baseline were the most significant actions on which agreement was reached. The coincidence of the configuration baseline, the as-built configuration, and the qualification configuration simplified the FACI review. Formal acknowledgment of the FACI completion is pending Headquarters receipt of the PE documentation, including the revised CEI specification.

5. The supply y- and x-axis vibration tests for the caging deletion study will commence 14 December and should be completed about 23 December. Quick-look data from the y-axis shake should give an early indication of how the caging deletion decision might go. The design margin vibration test will be conducted during the week of 4 January.

BYE-109325-70  
Page Three

~~C/IX~~ ~~SECRET~~



SUBJECT: Photo Reconnaissance Systems Report No. 70

B. Model Status

1. Development Model (SDV-III)

In-air photographic tests on SDV-III have been completed, and the system began vacuum photographic tests on 10 December. In-air data indicates a focal plane shift of as much as 24 microns may have occurred since the Danbury test. A full evaluation plan for the Chamber A-2 material is in preparation.

2. SV-1 (SN-003)

SV-1 mating operations were completed on 6 December. System level testing has been delayed due to problems arising in the aft section. The IRA TM system and command system have experienced failure during the past week. It appears now that it probably will be necessary to replace the IRA and the command programmer on SV-1 during the integrated test cycle. As of now, it appears that there will be a 3-day slip to completion of the SV-1 payload test (21 December vice 18 December).

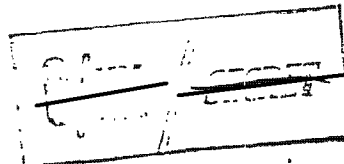
3. SV-2 (SN-002)

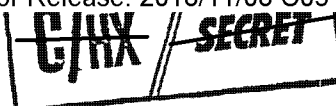
a. Midsection

Two in-air chamber tests have been run this week. A third in-air test is being run today. The modified metering capstan servos, which should solve the resonance problem, are expected to be available for SN-002 prior to start of Chamber "A" acceptance testing. Chamber pumpdown is scheduled for 16 December.

BYE-109325-70

Page Four





SUBJECT: Photo Reconnaissance Systems Report No. 70

b. Forward Section


Electrical checkout of the forward section cables is now underway. Updating of procedures for future assembly and test operations is in process.

4. SV-3 (SN-004)

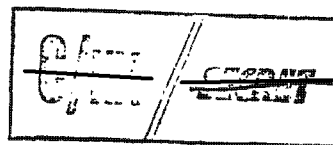
TCA vibration was completed on 10 December. Post-vibration inspection has been completed, and the system is now in the clean room undergoing post-vibration testing. The leak test was successfully passed.

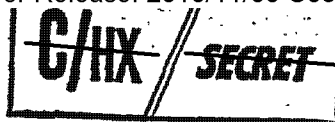
Post-vibration testing is scheduled for completion on 18 December, and midsection installation for 22 December. Ready Room "A" tests will be run from 28 December until 12 February. Chamber "A" testing is scheduled for 10 March-25 March, and shipment 14 April, one day before its contractual delivery date.

III. Meetings Requiring Participation of Headquarters Personnel

<u>Date</u>	<u>Subject</u>	<u>Attendees</u>
<u>PE</u>		
15 Dec.	SN-002 Chamber "A" Readiness Review	
17 Dec.	Black Box Qualification Certification Meeting	

BYE-109325-70  
Page Five





**SUBJECT: Photo Reconnaissance Systems Report No. 70**

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

LMSC

17 Dec.	Managers Meeting	Patterson
---------	------------------	-----------

15-17 Dec.	EK Configuration Change Board	Kohler
------------	-------------------------------	--------

Army Map Service

14 Dec.	TOPOCOM Briefing and Tour	
---------	---------------------------	--

Kohler

PMO/PRS/OSP

**Distribution:**

Cy 1 - D/OSP  
 Cy 2 - ADD/OSP  
 Cy 3 - D/PRS/OSP  
 Cy 4 - EO/OSP  
 Cy 5 - SA/IS/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 - NEPO  
 Cy 14 - WCPO

BYE-109325-70  
 Page Six

