

BYE-107520-71
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29 January 1971

MEMORANDUM FOR: Director of Special Projects

SUBJECT : Photo Reconnaissance Systems Report No. 77

I. CORONA

A. Accomplishments

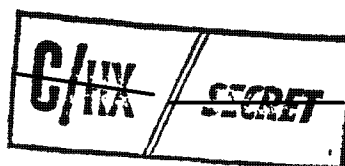
1. CR-13 (Mission 1113) completed its emissivity test, black paint touchup and thrust cone pyro loading. Spin pressurization was also begun. SRV flight assembly is 60 percent complete, and instrument slit verification is in process. The system is on schedule for launch on 17 February 1971.

2. Software support of the Mission 1113 preparation effort continues normally. Some minor problems had been encountered due to the retrograde orbit inclination. All software has now been extensively checked to assure compatibility and no further problems are anticipated.

3. CR-16's light leak test was successfully completed, and the film was retrieved for processing. The system will undergo vibration prior to the HIVOS test today.

B. Problems

No major problems.



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1. CR-13. Flight preps.
2. CR-14. Mods and R-25 backup preps.
3. CR-15. Pre-storage.
4. CR-16. Environmental test.
5. CR-8. Instrument acceptance.

II. HEXAGON**A. General**

1. Preliminary efforts to reach agreement on the follow-on work statement, the field support work statement, the three CEI specs (midsection, takeups, and forward assembly kit), and the hardware baseline description for P-7 continue. Perkin-Elmer still needs to provide some of the key remaining documents before meaningful contract negotiations can begin.

2. The OOPS meeting held on 26 January was not very productive. However, the following policy on wrap-and-cut was approved. The wrap sequence will be programmed to occur during a station contact. The trim and seal sequence will be programmed to occur during another station contact and will be protected with SPC inhibits. Release of the SPC inhibits will be contingent upon satisfactory verification of the wrap sequence. If a choice exists, VTS will be selected to monitor one of these sequences.

3. The proposed 'TUNITY ECP covering the requirements for OB shutdown uncertainty, camera power accounting,

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fixed rev interval for operating constraint accounting, and output of selected parameters (frame count, score per op, accumulated number of ops and operating time) was reviewed at the WCPO with PE, TRW and [redacted] on 27 January. External delivery of tested software from TRW is scheduled for 22 March.

4. The WCPO is participating in the rehearsal critique with [redacted] Headquarters, and SOC at the STC. No items of significance have been uncovered thus far. The proposed reports control manual is also being reviewed.

5. HEXAGON Orbit Generation (HOG) software, to be used at both Headquarters and WCPO, will provide rev-by-rev orbit elements based on "DORBEL" or "BREAKWELL" elements provided by the STC in support of HEXAGON missions. The "HOG" software is being written by LMSC personnel under the existing CORONA LOE contract. Completion in early March is anticipated.

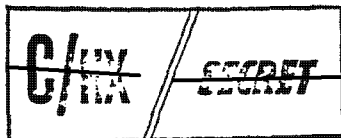
6. PE's acceptance testing of the first set of SSTC spares will be performed next week on the west coast. Technical certification is scheduled for the second week in February at Sunnyvale by the WCPO personnel. This set of spares will be retained on the west coast. The set for the PE facility is scheduled for acceptance testing in late March/early April.

B. Model Status

1. Development Model (SDV-III)

LMSC's PADPACS computer problems necessitated troubleshooting, repair and checkout. "Drop outs" still occur occasionally; however, test progress continues. If no additional problems develop, the sensor subsystem dynamic test at the pad will begin late Saturday afternoon.

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2. SV-1 (SN-003)

a. The SV-1 system was exposed to acoustic excitation on 21 January. The system was moved to the VIS and is currently in the post-acoustic vertical baseline test, which began 28 January. A visual inspection of the system revealed no obvious mechanical degradation resulting from the acoustic excitation.

b. A meeting was held at SVIC on 28 January to assess the desirability of interchanging the schedules for Chamber A-1 and Chamber A-2 vacuum tests to relieve schedule pressures created by the failures and late delivery of the extended command system (ECS). The timelines indicated an earliest possible date for Chamber A-2 readiness of 16 February, and therefore it was concluded that the referenced schedule should not be altered unless new ECS problems develop. Chamber A-1 testing is now scheduled to begin on 7 February.

3. SV-2 (SN-002)

a. Forward Section

RV #9 (containing TUA #012) has been installed in Bay #4. The TUA is awaiting a functional test which has been delayed due to problems with the 4 RV Test Station. Functional testing should begin no later than 1 February. TUA #019 (scheduled for installation into Bay #3) is undergoing system mods.

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b. Midsection

Investigations are still underway to determine the cause of the film jam of the "B" camera which occurred on 23 January during acceptance testing in Chamber A.

4. SV-3 (SN-004)

Following the determination that OB "B" was out-of-spec in the passive focus mode, it was replaced with SN-005's OB "A" (after the necessary conversion from "A" to "B" configuration). Buildup and checkout of this fix is now underway. Slow turn-on and film movement is scheduled for 30 January. MFN 3.09 (in-air acceptance tests) is now scheduled for 5 February vs. 2 February. This slip is due to the OB replacement.

III. Meetings Requiring Participation of Headquarters Personnel

| <u>Date</u> | <u>Subject</u> | <u>Attendees</u> |
|-------------|------------------------------------|------------------|
| | | |
| 2-3 Feb | Spares Provisioning Conference | |
| <u>WCPO</u> | | |
| 4 Feb | Spares & Film Handling Discussions | |
| <u>LMSC</u> | | |
| 4-5 Feb | TT&C IFWG | |

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RCA

3 Feb P4-2 Buy-off

Horizons

3 Feb Horizons Contract Review

~~75/ D. W. Patterson~~
DONALD W. PATTERSON
D/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

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