

BYE-109500-70 Copy <u>/C</u> of 14 18 December 1970

MEMORANDUM FOR: Director of Special Projects

SUBJECT

: Photo Reconnaissance Systems Report No. 71

# I. CORONA

## A. Accomplishments

CR-2 (Mission 1112) analysis of No. 2 instrument and DISIC failure are continuing in preparation for the PET Meeting on 5 January 1971.

#### B. Problems

All motors, other than those installed in CR-13 and CR-15, involved in the slope programmer problem are being returned to the vendor for refurbishment.

#### C. Projected Schedule

- 1. <u>CR-13.</u> Pre-storage special tests being run to verify proper incorporation of all past systems mods.
- 2. <u>CR-14.</u> Storage R-25 status special tests are also being run.
- 3. <u>CR-15.</u> Pre-storage.
- 4. <u>CR-16.</u> Environmental preps.
- 5. <u>CR-8.</u> Instrument acceptance.

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C/HX SECRET

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

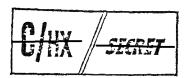


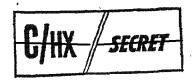
## II. HEXAGON

#### A. General

- 1. The effort to delete caging on the supply continues to show promise. Signature and qualification level tests (0.5 g's) were conducted on 17 December with no observable degradation of the film stack and with the first mode occurring at 23.5 cps. (A frequency below 20.0 cps would have caused a severe interface problem with LMSC.) Configuration checks of the film stack are being made and a design margin test (1.0 g) will be conducted in January.
- 2. A review of the data obtained on SN-002 during inair testing was held at Perkin-Elmer on 15 December. The data presented at the meeting showed that the in-track smear requirements would not be met and that Camera "A" exhibits large focus variability. The review team pointed out that acceptance of the system with those deficiencies would require waivers but that the government would not direct that testing be terminated until the deficiencies were corrected. Subsequent to the meeting, PE elected to change Optical Bar "A" to improve system performance. During this OB change, the Project Office "suggested" that the platen from that OB be subjected to an assurance level random vibration test. This "suggestion" was predicated upon PE's test flow which had not required a retest of the platen after the last partial disassembly and rebuild (with new fine tension rollers and slit and shutter assembly). The platen was vibration tested on 17 December.

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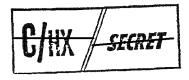
- 3. An Operations IFWG meeting was held on 10 December in Building 156. The problem of RTS tapes was discussed and procedure agreed upon, but the question of PE having priority for support of the "HOPE" report was not settled. SP-7 is working on a briefing to be given to Col. Buzard/General King. For details please refer to SPO TWX 5712 (being transmitted).
- 4. The TRW message on solo phase (post-RV-4 recovery) flight test has been reviewed. Most of the points covered by the message have been incorporated in the test plan submitted.
- 5. Rehearsal Number Two started at 1000 PST 15 December 1970. A number of problems have appeared, with most of them being minor with the exception of one recovery-predict software problem. This problem is being worked and should be corrected by the end of the rehearsal; however, only one recovery will be made (two were planned).

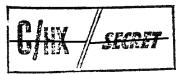
#### B. Model Status

## 1. Development Model (SDV-III)

- a. The vehicle has been removed from the A-2 chamber, and one of the two identical sequences on the film was processed locally and is being evaluated at WCFO. The film containing the other set of sequences was shipped to Rochester for processing and subsequent evaluation at Westover.
- b. A small heat leak was discovered in RV-2, and McDonnell Douglas is conducting a test to attempt to isolate the problem. PE will then begin the supply reload when the heat test is finished.

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## 2. SV-1 (SN-003)

No PE effort was expended on SV-1 due to LMSC operations. PE operations should resume no later than today. PE/WCFO will fix SSC II recessed pin on 21 or 22 December.

## 3. SV-2 (SN-002)

#### a. Midsection

PE has decided to replace Optical Bar "A" to correct a focus variability of that bar. The new bar will come from SN-005. The FEV redesign is now being incorporated into SN-002. System test will restart on 22 December at the earliest. Acceptance tests are scheduled to restart on 28 December. MFN 3.09 (Ready Room "A") tests will be completely rerun. Chamber in-air tests are scheduled to start on 2 January. The system is projected to be ready for shipment in early February.

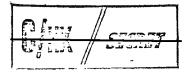
#### b. Forward Section

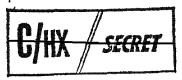
Correction of anomalies observed during the cable checkout is in process. Test procedure documents for the assembly and test of SV-2 forward section are being revised and updated.

## 4. SV-3 (SN-004)

The two-camera assembly (TCA) was installed in the midsection (MSA) on 17 December. TCA alignment

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and installation of cables within the MSA was started 18 December. It is expected that the supply will be installed in time for the MFN 3.05 (Manufacturing & QC Verification) tests to begin 28 December. The system is approximately four days ahead of schedule to a 15 April ship date.

## III. CONFIGURATION CHANGE BOARD

- 1. The CCB visited TOPOCOM and NRTSC on 14 December 1970 for briefings on the function, activities and programs of these facilities.
- 2. The Quarterly CCB Meeting was held at WTC on 15-17 December 1970. A detailed summary of the meeting will be submitted as a separate memorandum. However, six (6) new PAR's (tasks) were presented by the contractor. These requests totaled \$596,000. Of the six presented for approval, three were approved totaling \$340,000; two were deferred and one was disapproved. The actions were as follows:
  - a. PAR 25-1-6S, Color Image Evaluation Methods; ROM \$85,000 Approved.
  - b. PAR 1885, Improvements in Small Image Mensuration; ROM \$95,000 Approved.
  - c. PAR 190S, Protective Coating for Color Acquisition Films, Phase 1; ROM \$36,000 Deferred.
  - d. PAR 185B/Rl, Interframe Color Control Printer, Phase 1; ROM \$150,000 Deferred.

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e. PAR 25-1-3S, Image Evaluation by Means of Information Measure; ROM \$70,000 <u>Disapproved</u>.

f. PAR 23-1-11S, Contact Printing Parameters; ROM \$160,000 Approved.

# IV. Meetings Requiring Participation of Headquarters Personnel

Date	Subject	Attendees
Westover		
22 Dec	SDV-3 Chamber A-2 Te. Data	st
HQ		
22 Dec .	Follow-on Work Statements	
22 Dec	PSO Spares	

AD/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 II - PRS/File

Cy 12 - PRS/Chrono

Cy 13 - NEPO

Cy 14 - WCPO



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