HEX-10290-69
Copy 10 of 14
19 September 1969

MEMORANDUM FOR: Director of Special Projects

SUBJECT: Photo Reconnaissance Systems Report No. 6

I. CORONA

A. Accomplishments

J-46 - The supply motor was replaced in the forward-looking instrument. The system was tested with a full, half and empty supply--no problems. The system was shipped to Vandenberg Air Force Base on 15 September. This receiving inspection was run, and the payload mate was successful. During countdown, commanding problems were encountered. Because of replacement of booster hydraulic high pressure relief valve, the launch of Mission 1052 is postponed until Monday, 22 September.

B. Problems

1. CR-8 - Qual Testing. During resonance search, the aft-looking instrument mistracked. The most probable cause is a misaligned nod roller. The nod roller adjustment set screw was found to be damaged. This assembly was replaced. The system is being re-run to confirm correct operation prior to the scheduled qual test of 29 September.

2. CR-10. The Delta ramp-up anomaly is still under investigation. A series of tests on the amplifier is being run. Results are being evaluated.

C. Projected Status

1. J-46. Launch countdown - holding.

2. CR-8. Qual preps.

3. CR-9. Storage.

4. CR-10. Functional Testing.

5. CR-11. Light Leak Testing.

6. CR-12. Acceptance Testing.

7. CR-13. Starting instrument mods at the Page Mill Facility.

II. HEXAGON

A. General

1. The Project Office was informally advised during the week that Eastman-Kodak management is most likely to authorize the facility changeovers necessary to allow consistent film production in equilibrium with RH levels down to 30%. The Project Office issued a message during the week committing to Kodak the need for 40% RH film. Following the evaluation of the "E" Model sticking tests and the Wright-Patterson film tests, we should be able to redefine the maximum RH, if necessary. But even so, if Kodak is making preparations to go as low as 30%, we should have no problems. Eastman-Kodak informed us that the facility changeover time to allow lower RH film production would be from 6 to 8 months. Our most immediate needs for 40% film are the "D" model. We have two large stacks of 40% film on order with delivery expected between 1 and 15 December. It is felt that if these rolls are not used at Danbury, they will be sent out to SBAC and used in the SDV-3 chamber testing. If, however, these stacks are used in the chamber tests at Danbury, we may well have to order additional 40% film for the chamber tests at SBAC, since the field requirement is 90,000 feet per spool.

RH readings of all the large film stacks, to date, in their shipping containers as indicated by the container RH sensor are:

Container No.	RH
1	49%
2	47%
3	53%
4	50%
6	53%
9	47%
10	50%
Spec	45% ± 5%

Containers No. 2 and 9 have the 40% RH material in them. It is felt that the container indicators do not really measure the film RH since they are located up in the container polyurethane foam insulation and do not have a probe that extends into the film compartment. This is being investigated.

2. The photo lab equipment is in the mid to final stages of installation at SSC/WCFO and the two Kodak advisors will visit the facility next week for installation consultation. Kodak will be responsible to us for certification of the machines (processors and chem mix system), and this certification will come at some later date when the chemistry is better defined. Property accountability of this equipment will, of course, remain with Molloy, and accountability records will be compiled and sent from SBAC to SSC with an information copy to Molloy.

3. The NRO authorized this week the funds for the purchase of 10 additional large film stack shipping containers. Kodak has stated delivery will occur following a 7-month lead time from go-ahead at a rate of two per month. Since it does not appear we will be tight on containers until possibly the flight models get moving on the West Coast, we should be in good shape. This will bring the total quantity of containers to 20, and we feel this is sufficient for the duration of the program.

4. There is a possibility of some slippage in the Wright-Patterson film tests, particularly the air bar sticking tests. We were advised by [redacted] that the Base steam lines are out of operation for an indefinite period of time pending some sort of equipment changeover, and since his chamber takes its humidity from the steam lines, the equipment may be out of use until the steam lines are reactivated. He is currently working the problem and promises to advise us next week of any possible workaround.

5. It is understood that milestone 2 for the SCF real-time TM data system is scheduled for distribution next month. SSC/WCFO has been requested: (1) to re-evaluate the on-orbit TM processing requirements thus far identified, (2) to accomplish a more comprehensive and detailed determination of TM processing and display capabilities required of the SCF real-time data processing system for ops support. It is anticipated that initial results of this evaluation will be discussed next week.

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B. Engineering Model

Both optical bars are installed and aligned into the frame. The bonnets are being installed today. Insertion of the TCA into the SBA slipped four days from last week's report and is now scheduled to begin Saturday, 20 September, and be complete Sunday, 21 September. The supply has completed the SUTS testing and is planned to be mated to the SBA midsection on 21 September. Mate-up with the EM #1 TU, RV simulator, and forward section simulator is to occur 22 September with the ready room "A" tests to begin late on 22 September 1969. This date was not affected by the slippage of the TCA/SBA mate.

C. Development Model

The Development Model has maintained its schedule this week. Start of TCA integration into the midsection is still anticipated on 22 September. The ship date is +18 days or 2 February versus a 20 February need date.

D. Flight Article #1

1. Optical Bar A has completed vibration and is in acoustic test. Optical Bar A is scheduled for Chamber D on 22 September.

2. Optical Bar B (Set 14) is minus 7 days to a 9 October delivery from OOD.

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III. Administrative

Meetings Requiring Participation by Headquarters Personnel

Date	Subject	Attendees
HEADQUARTERS		
26 Sept	Block II Discussions	
23 Sept	TU Shipping Procedures	
1 Oct	H Schedule Briefing	Staff
2-3 Oct	Long-Range Planning	Patterson,
PERKIN-ELMER		
23 Sept	Briefing to NRO/TOPO Command Reps	
24 Sept	Crysper Computer Program	Kohler
24 Sept	H Managers Meeting	Patterson,
25 Sept	Briefing to Dr. Sorrels	
22-24 Sept	Contract Change Negotiations	Patterson, McDonald,
25-26 Sept	EM/DM Data Review	Burks, Kohler
30 Sept	Briefing to Drs. Naka and	Patterson,
ITEK		
24 Sept	Briefing to Dr. Sorrels	

~~TOP SECRET~~
SPECIAL HANDLING

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Date	Subject	Attendees
EASTMAN-KODAK		
23 Sept	Crystal Ball Computer Program	Kohler

[redacted]
PRS/OSP

Distribution:
cy 1 - D/OSP
cy 2 - DD/OSP
cy 3 - PD/H/OSP
cy 4 - EO/OSP
cy 5 - C/D&AD/OSP
cy 6 - CB/OSP
cy 7 - C/PAD/OSP
cy 8 - C/SB/OSP
cy 9 - C/SS/OSP
cy 10 - OSP/RB
cy 11 - CSP/H File
cy 12 - OSP/H Chrono
cy 13 - Mr. [redacted]
cy 14 - Mr. [redacted]

DD/S&T/OSP/PRS/[redacted] X5725 (19 September 1969)

[redacted]