



BYE-107031-70 Copy /O of 14 1 May 1970

MEMORANDUM FOR: Director of Special Projects

SUBJECT

: Photo Reconnaissance Systems Report No. 38

I. CORONA

A. Accomplishments

- 1. DD/S&T Training Class was given a complete briefing and facilities tour on 27 April.
- 2. Move preparations are proceeding. Mod 65 computer installation at Building 156 is complete with CORONA operational software checkout completed satisfactorily. Vibration room hoist is to be moved this week. The Mod 50 computer at A/P was returned to IBM on 1 Msy.
- 3. CR-II orbit determination and flight requirements have been completed.
- 4. The QR-2 DISIC (# 14) discussed in last weeks' report has been replaced by #13 as noted.
- 5. CR-11 for mission ill0 will be shipped to VAFB one day early to participate in an exercise to prove capability of receiving checkout for earlier mate on future missions.

B. Problems

- 1. CR-11 emissivity tests indicate a requirement for removal and replacement of thermal tape prior to launch on 20 May. Rework will be accomplished this week.
- 2. DISIC #14 is to be returned to F.C.I.C. for replacement of the front lens element and refurbishment.

GACUP 1
Exclused from automatic
foreignating and
factory:fronties





C. Projected Status

- 1. CR-11. Flight preps and retape.
- 2. CR-12. Storage and back up.
- 3. CR-13. ReHIVOS preps and roller change.
- 4. QR-2. Vibration and HIVOS.
- 5. CR-14. Environmental preps.
- 6. CR-15. Functional assembly.

II. HEXAGON

A. General

- 1. DD/S&T Training Class was given a briefing on overall HEXAGON Program by Col. Heran and a tour of Building 156 by the WCPO staff.
- A basic disagreement was immediately evident. P.E. presented the baseline test as the only acceptance test, while the Project Office felt that the vibration, thermal, alignment, and EMI as well as the baseline test were acceptance tests. The CEI spec presented was considered inadequate, especially in view of a comprehensive CEI spec between P.E. and RCA. None of the configurative baseline data was available prior to the presentation; however, a subsequent review by SETS was very satisfactory. The documentation was considered to be in excellent shape. The Project Office has directed P.E. to consider the environmental tests as acceptance tests and also plans to use the RCA version of the CEI spec as the official take-up CEI spec. With the incorporation of these changes to the take-up FACI and a better definition of qual status and plans, it will be acceptable to the Government.



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- 3. The Spares Meeting which was held on the West Coast this week concluded with the selection and vendor identification of electrical and mechanical spare parts for the 4 RV Test Station and mechanical parts for the take-up simulator and the supply test station. Perkin-Elmer now will provide an ROM cost figure and submit this to the Project Office. P.E. has been asked to send a copy of the package to the depot as soon as it becomes available.
- 4. A supply core was sent to SETS this week for their experimentation on core pressure measurement techniques.
 - 5. P.E. will receive the following next week from Kodak:

Danbury

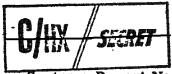
- o Basic load of MX-819 chemistry
- 8 30,000 ft. 1414 film for processing tests
- o Two 26,000 ft. 1414 photo quality

West Coast

- o (for shipment over the weekend) Two 26,000 ft. LS SO-380
- 6. The reason for the Development Model IMC problem appears to have been identified. P-1 data analysis shows that a similar problem exists and that the cause is the mod computer. Corrective action has not yet been identified; however, there are a number of available alternatives.
- 7. P.E. was directed to terminate the studies of a pauseless recycle profile as part of the improved sequencer effort. This action was taken as the result of a preliminary P.E. analysis, which SETS concurs in, that there is essentially no improvement to system reliability with the pauseless profile, and other studies (super looper, etc.) would be adversely affected.
- 8. The Project Office attempts to conduct a parallel assessment of the P-1 Model continue to have problems. For instance, when data tapes of the pre- and post-vibration functional tests were received, they were found to have had a format change which is incompatible with the Agency programs. The programs are now being



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modified to accept the change. Perkin-Elmer representatives will meet with Project Office personnel at Headquarters on 6-8 May to further define the Government's data requirements and need dates for this data in order to effectively conduct a parallel effort.

B. Development Model

- 1. All RV's have been installed in the forward section structure and film tracking tests have been completed on three take-up units. Tracking verification on take-up no. 1 began on 30 April.
- 2. The midsection was released to SBAC for installation of their components (cables, boxes, insulation, etc.), and this work is now in progress. The defective master mux unit, returned again to Spacecraft for repairs, is expected to be available on 2 May. The MS is planned to be returned to SSC/WCFO on 1 May for completion of R&I which is expected to take 13 working days. Availability of the MS for mating to the aft section is 16 May.

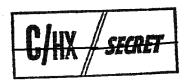
C. Flight Model No. 1

Baseline testing (MFN 3.09) has been completed. EMC testing (critical test points) is being conducted and should be completed 1 May. Midsection vibrations should start early next week. There are a number of EMC anomalies which will have to be cleared up shortly. A few days will probably be lost in the schedule in clearing these anomalies.

D. Flight Model No. 2

Coarse film path checkout has continued during the week and has been plagued by day-to-day-type failures, i.e. broken rollers in the simulators, switch failures, etc. P.E. is now claiming for political reasons a 14 September 1970 ship date for P-2 vs an original 14 August 1970 date, based on late midsection delivery and release to P.E. The Project Office does not concur in this rationale.

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m.



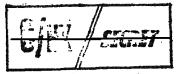
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Meetings Requiring Participation of Headquarters Personnel		
Date	Subject	Attendees
LMSC		٠. ج.
5 May	HTC (TRW) Interface Document Review	
HTC		
7 May	Command Sequencer Sub- Group	
P. L.		
5 May	Witness Vibration Testing of P-1 Midsection	
Hqs.	•	
5 May	Pre-planning P-1 FACI and Acceptance Requirements	Staff
6-7 May	P-1 FACI and Acceptance Requirements	Staff
NPIC		
7 May	PFA Facilities Planning Meeting	

PMO/PRS/OSP



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Cy 13 -

Cy 14 -

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