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SPECIAL HANDLINGHEX-10439-69
Copy 10 of 14
3 October 1969

MEMORANDUM FOR: Director of Special Projects

SUBJECT: Photo Reconnaissance Systems Report No. 8

I. CORONAA. Accomplishments

1. CR-8. Completed acoustic testing in Sunnyvale. The system was returned to AP for visual inspection and confidence run. One main instrument drum roller and a DISIC film guide roller were shaken loose. The drum roller was replaced and confidence run completed. The DISIC guide roller will be redesigned. CR-8 was returned to Sunnyvale 2 October for shock tests.

2. CR-9. Completed main instrument (No. 317) focus investigation. Shims will be removed and resolution test rerun.

3. J-46. Successfully recovered "A" Bucket on 29 September. As of rev. 172 no recurrence of V/H problem last encountered during rev. 33. It is believed the anomaly was caused by a "chattering" switch in the pulse network of the V/H programmer.

B. Projected Status

1. J-46. Mission 1052 progressing normally--anticipated "B" recovery on or about 7 October.

2. CR-8. Shock test.

3. CR-9. Storage R-15 back-up.

4. CR-10. Pre-HIVOS preps.

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5. CR-11. System testing.
6. CR-12. Acceptance testing.
7. CR-13. Main instrument mods at Itak West Coast Division

II. HEXAGON

A. General

1. Negotiations with SSC for all of the identified un-negotiated changes including Plan B and Omnibus were completed and agreed to by Messrs. Maguire and Robertson on 2 October. A new target cost for incentive fee purposes was established at \$195,000,000. Several changes to the basic contract work statement were included to clarify certain areas of the work statement and to correct deliverables and delivery schedules. A complete report of the results of the negotiations will be provided to Mr. Crowley upon his return.

2. It appears that RCA may in fact be even in a worse fiscal position than had been stated in the review of Mr. Maguire about three weeks ago. It now appears that the cost of the development program may well exceed the \$15,000,000 level which was projected at that time. P.E. is giving consideration to the possibility of bringing the take-ups in-house in the event that RCA cannot get their schedules tied down in such a way as to assure delivery of equipment on schedule. A recommendation on any such decision is expected to be made to the Project Office within a week.

3. Mr. Maguire provided cost information for various schedule options for the program. Four options were considered: 1) continuing on the present schedule with initiation of follow-on production keyed to delivery requirements for the seventh flight article; 2) stretch-out of the present schedule to one unit every three months which would extend the present contract by approximately three months and would result in the seventh unit being delivered three months after the sixth unit; 3) staying on the present schedule and delivering the seventh unit three months after the sixth unit which would result in a backup sensor at the fifth flight unit and

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would provide for a spare thereafter; and 4) the same option as 3 with the exception of procuring long lead time items for only two systems in FY 1970 rather than four systems. Under options 1 and 2, \$3,858,000 would be required for long lead time procurement in FY 1970. Under option 1 the additional cost to the present contract would be approximately \$6,995,000 and under option 2, \$3,694,000. Option 3 would require \$16,000,000 for long lead time items in FY 1970 but would have no cost impact on the present contract. Option 4 would reduce the FY 1970 cost to \$11.5 million but would add approximately \$500,000 to the follow-on procurement costs for additional tear-down and set-up of tooling and for the additional costs associated with a split procurement. These various options will be discussed with [redacted] on 3 October to determine the schedule on which we should proceed.

4. A quarterly management review of the SSTC was held at AC Electronics on 2 October 1969. SSTC #2, due to be delivered to SSC by 15 October, is presently undergoing dry run acceptance tests, with a formal acceptance test for SSC buyoff scheduled to begin 7 October. All changes are in SSTC #2 with the exception of an extra set of command and control boards for a preprogrammed mode. Though SSC hasn't given final consent, AC will probably do this last outstanding retrofit and deliver SSTC #2 on 28 October 1969.

5. The AC Acceptance Test Procedure (ATP) rewrite is in process and should be complete prior to formal acceptance test on 7 October. SSC will get a marked up ATP that deletes procedures related to temporary set-ups at AC that are not duplicated at SSC. The SSC "marked up" ATP is needed no later than two weeks after the SSTC #2 is delivered. AC didn't realize until 1 October that the ATP's would be different. A firm date for SSC's ATP was not established.

6. SSTC's #2, 3 and 4 have exactly the same design.

7. AC will not commit to a delivery date for SSTC #5 on an incentive contract unless they are given full go-ahead. SSC prepared a list of long lead parts that would accompany a partial go-ahead. AC wants the option of selecting and ordering long lead parts, especially on an incentive contract. SSC representatives were surprised (with the exception of [redacted])

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Subcontracts) that the letter contract for long lead items for SSTC #5 had not been sent to AC. The Project Office gave SSC approval to procure long lead items for SSTC #5 on 24 September 1969.

8. On 8-9 October, [redacted] will meet with Lockheed to review their proposal for the consolidation of the CORONA Program from the AP into Sunnyvale.

9. A presentation is being prepared for dry run on 14 October on the consolidation of CORONA and HEXAGON. The presentation will be given to Mr. Patterson and Mr. McMahon and is broken down into three sections: (1) technical, (2) security plan, and (3) contractual plan.

10. On 10 October, P.E. is to present at Headquarters their software programs and their methods for the operation of a computer at Building 156.

11. Some additional testing is required by E.K. on the qual film stack to determine the pressure exerted on the core to a more accurate degree than it is now known. This is necessary so that they can properly regulate their builder roller pressure. The qual stack has been sent to E.K. from P.E. and the internal E.K. scheduling is now in process.

12. Eastman-Kodak hopes to present to their management next week the problem of the facility changeover to allow low RH film production and get a decision from them on this matter. We have been promised that a decision would be made by late October at the latest.

13. A meeting at Perkin-Elmer on Tuesday regarding the photo lab acceptance and AGE acceptance showed that internally, Perkin-Elmer is not fully coordinated on these matters. Regarding the photo lab, acceptance will be as follows: the long light table, being a piece of AGE, will undergo acceptance tests and FACI, following which this item will be accepted by the Government; the Government will observe the internal acceptance tests of the other equipment. Of particular concern are the microdensitometers. A small Kodak team will probably be used to verify proper operation of the GFE (processors, etc.).

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14. An internal meeting at Perkin-Elmer was to be held on 3 October to clarify certain sections of the CAD. Jerry Braddon, the Director of Product Assurance, is the individual in charge of AGE, and it is felt by the Project Office that he will clarify this situation.

15. A brief discussion was held at Headquarters with Messrs. Maguire and Robertson regarding the problem of maintenance programs and associated spares. It was emphasized to them that Headquarters has not yet seen an appropriate maintenance plan nor, to our understanding, has a tentative list of spares been sent to [] at the depot to check availability. Since we have started getting requests for emergency TFE spares, we are pressing them to submit an acceptable maintenance plan.

16. Progress in the S&M IFWG has come to a stand still since the August meeting. This was caused by SBAC's failure to modify IRN's as agreed to at the August IFWG and September subgroup meetings, and by excessively long delays in submitting official copies of IRN's to SSC for internal review prior to meetings. The SPO has been informed of the problems, who then verified the situation with Aerospace and discussed the problem with SBAC management. The situation will be monitored to insure that the November IFWG meeting is productive.

17. Perkin-Elmer has reorganized to form a third group parallel to Offenhartz and Robertson with B. Malin as head. Mr. Malin does not attain the status of Assistant General Manager, but does report directly to Mr. Maguire. The Model Engineers, Model Expeditors and Schedule Control (R. Sisk) now report to Malin.

B. Engineering Model

1. The Engineering Model is in Ready Room A and has partially completed the servo check out. The Supply, Optical Bar, and take-up servos have been exercised. In running the fully functional optical bar, it was determined that a once per cycle variable drag has developed since the Chamber "B" tests. The film path pressure seal is suspected as the cause. Headquarters is assessing the effect on the Chamber "A" test results at this time.

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2. The MLI blankets have been painted to increase the absorptivity of the outer layer. This was necessary to allow the IR array control calorimeters to be calibrated.

C. Development Model

The Development Model is maintaining its schedule of +15 days against the 20 February delivery date. Ready Room B testing is proceeding.

D. Flight Article #1

1. TCA assembly is now scheduled for completion on 2 December versus a 21 November milestone. The pacing item is optical bar B, which is minus 14 days to the required delivery from OOD. Optical Bar B is in Chamber C.

2. Flaten A is now on schedule as a result of a replan to the need date for TCA assembly.

3. The 3A1 need date has been slipped to 5 December based upon a 2 December TCA completion. Radiation is reported to be on schedule to the 5 December need. P.E. appears to have decided not to limit the EMC qual test to one camera; therefore, the development model 3A1 boxes would appear to be unavailable.

III. Administrative

Meetings Requiring Participation by Headquarters Personnel

<u>Date</u>	<u>Subject</u>	<u>Attendees</u>
<u>PERKIN-ELMER</u>		
7 Oct	Electronic FACI Package Review	<input type="text"/>
7-8 Oct	A&T IFWG	Burks
8-9 Oct	RV/SS IFWG	<input type="text"/>

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<u>Date</u>	<u>Subject</u>	<u>Attendees</u>
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PERKIN-ELMER (continued)

15 Oct	Naka Briefing	Patterson, [redacted]
16 Oct	Managers Meeting	Patterson

SBAC

7-8 Oct	Pre-IFWG Meetings with WCPO and SSC/WC	Webb
9 Oct	OPS IFWG	Webb, [redacted]
9-10 Oct	Naka Committee Review	[redacted]
10 Oct	Integrated Schedule IFWG	[redacted]
10-13 Oct	Discussions with WCPO	Webb

VANDENBERG AIR FORCE BASE

14 Oct	Review of Launch pad activities	Webb
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SAFSP

15 Oct	Orbital Operations Planning Support (OOPS) Meeting	Webb
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HEADQUARTERS

10 Oct	West Coast Computer Review	Patterson, [redacted]
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