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HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

DEPARTMENT OF THE AIR FORCE

MANNED ORBITING LABORATORY, SYSTEMS PROGRAM OFFICE (OSAF)

AF UNIT POST OFFICE, LOS ANGELES, CALIFORNIA 90045



25 BCT 1967

MEMORANDUM FOR GENERAL STEWART

SUBJECT: MOL Monthly Management Report, 25 Aug-25 Sep 1967

Attached for your information is a copy of my Monthly Management Summary to General Ferguson. Also attached is a more Detailed Monthly Report of Significant Events, 25 Aug-25 Sep 1967.

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1. Memo

2. Detailed Report

S. BREYMAIER, Maj Gen, USAF Deputy Director, MOL

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MEMORANDUM FOR GENERAL

MOL Monthly Management Report, SUBJECT: 25 Aug-25 Sep 1967

A synopsis of major events for the month of September is covered below to apprise you of their status:

- 1. Two briefings were provided to General Stewart on 7 September. The first was a status report on the critical technology for the Optical System. The optical technology appears to be difficult but is being adequately addressed at technology this time. However, the is not being adequately addressed, and one of our recommendations was a proposal to fund some work in this area using non-MOL study monies. The second briefing was a final report from Douglas on the Long Duration Operations Study. Copies of this report have been sent to your office.
- A rather extensive briefing was provided here on 20 September to Eastman Kodak personnel who are conducting the Option System configuration study to assist them in understanding the overall system approach and problems from the MOL advanced planning point of view. information provided was concerned with follow-on efforts in space power, control problems, navigation and flight dynamics.
- I have signed out identical letters to Douglas, McDonnell Douglas, General Electric and Eastman Kodak asking for their initial comments on a proposed model Radiation Specification for the MOL Orbiting Vehicle. Representatives of the staff are visiting each contractor to discuss the technical impact. No funded effort is involved at this time. I expect that a preliminary assessment of the impact will be available within 30 days, at which time I will consider what further effort might be appropriate.

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- 4. Limited Static Load Structure (SLS) testing has been initiated by Douglas, Huntington Beach, for Eastman Kodak. Structural changes to correct Douglas' design deficiencies must be incorporated before complete tests may be accomplished. Repeat tests will be conducted when the structure has been modified for the Sliding Mask and the fourth load cycle data is available.
- 5. The Primary Mirror Blank for Flight Vehicle 6 was received from Corning on 22 September. In addition, the 20th and 21st trial pressings of 71" Cer-Vit R&D lightweight blanks were poured apparently successfully on 21 and 23 September, respectively, and are undergoing annealing through 2 October 67.
- 6. Assembly of Eastman Kodak's Structural Development Model (SDM) No. 1 is progressing on schedule at Rochester, New York, and should be ready for testing at the camera optical assembly level in mid-November.

A summary assessment of the Program is that there are no schedule problems to be brought to your attention at this time. All of the segment contractors are proceeding in accordance with the Master Schedule. I think that the funding status was adequately covered at our meeting of 29 September.

J. S. BLEYMAIER, Maj Gen, USAF Deputy Director, MOL

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DETAILED MONTHLY REPORT OF SIGNIFICANT EVENTS

25 August 1967 - 25 September 1967

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- AFB, Ohio. Current MOL Zero G test planning was discussed. A preliminary one year schedule of testing was provided to Mr. D. Griggs, Zero G project manager. He agreed that the schedule was acceptable and that no problem was anticipated in supporting MOL requirements. The Crew Transfer/DRC Handling Working Group Charter was also discussed and it was determined that a Zero G working presentation might be made an agenda item in some future working group meeting. A copy of a Crew Transfer Technical report TOR-1001(2107-15)-11 was made available to Mr. Griggs so that ASD personnel would have a concept of the overall crew transfer task. ASD presented films of the Apollo crew transfer Zero G tests conducted during Jun. These films showed NASA solutions which could be applicable to MOL extra vehicular transfer. A copy of this film has been provided for MOL SPO/Aerospace and McDonnell review.
- 2. A Preliminary Design Review (PDR) of the Gemini B Procedures Simulator (GBPS) computer program was conducted at Conductron-Missouri, St. Charles, Mo., on 19 Sep 67. The completion of this PDR was held open until McDonnell/Conductron reviewed the requirement to incorporate additional Titan IIIM malfunction simulations into the GBPS software.
- 3. A meeting of the Development Simulator Operations Group (DSOG) was conducted at SAMSO on 6-7 Sep with GE in attendance. A tentative agreement was reached on the first 6 months experiment operations for the Elemental Development Simulator (EDS). The primary limitations to the early experiments are simulator configuration and stimulus material availability. A simulation briefing was presented to the new Flight Crew members on 7 Sep.
- 4. Emphasis was placed on expediting agreement on safety requirements that affect GE. Two proposed Technical Directives were submitted to the contractor for review and comment on 13 Sep. The areas covered were:
- a. Fire Detection and Fire Suppression Support Study The contractor was requested to establish an estimated cost and was authorized to contact Aerospace personnel if questions or clarification was required. It is anticipated that a meeting will be held at a future date for orientation purposes to acquaint GE with the current status of effort of other agencies and to answer any questionable areas in the GE area of responsibility.
- b. Non-Metallic Materials Combustion and Atmospheric Contaminant Control Standard (SAFSL Exhibit 10010) The contractor was requested to review the revised Exhibit and prepare for a SPO/Aerospace meeting to be held during the week of 25 Sep. The contractor was also requested to prepare a revised cost estimate based on the changes reflected in the Exhibit (i.e., performance of screening tests at White Sands.) The contractor was authorized to contact Aerospace if immediate technical clarification was required.

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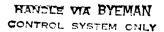
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- 5. Of the 225 total MOL interface documents, 125 have been scheduled for signoff, 91 have been signed off, 48 have been approved by Specification Control Groups, and 37 have been approved by the MOL Configuration Control Board (CCB).
- 6. The CCB reviewed 75 ECP's; 42 were approved; 7 were disapproved; 26 were deferred for further evaluation. The cost bearing ECP's approved by CCB actions totalled approximately \$300,000 based upon contractor estimates.
- 7. An initial in-house cut has been made on a proposed target card format to specify operational photographic requirements for the DORIAN system. This format was reviewed with the Foreign Technology Division at Wright-Patterson AFB on 18-19 Sep 67. A suggested priorities scheme will be attempted for the SAC-developed MOL 608 target model. These actions support the baseline definition effort for establishing the MOL targeting requirements.
- 8. Retrieval of MOL astronauts from the ocean environment adjacent to the western and southern portion of the Sudden Ranch coastline at Vandenberg AFB was tested for feasibility during the period 28 Aug through 1 Sep 67. The tests were a continuation of those undertaken at Patrick AFB. The Aerospace Rescue and Recovery Service (ARRS) H-3C helicopter performed the actual retrieval efforts. Overhead backup, aerial photography, and amphibious support were also provided, with the Western Test Range conducting the test. Astronaut retrieval from the VAFB surf area via helicopter appears to be an acceptable method. Other means of retrieval will continue to be examined and evaluated.
- 9. SMAMA has received the bulk of the NASA listed GFE recovery AGE to be utilized in support of MOL recovery operations. With exception of some corrosion and minor damage, the equipment was received in good condition.
- 10. Contract with TRW, Mission Planning and Evaluation Software for MOL DORIAN Program, was forwarded to Gen Higgins for manual approval on 20 Sep 67.
- 11. Contract for the MOL Feeding System Assembly was awarded to Whirlpool Corporation, St. Joseph, Mich., on 12 Sep 67.
- 12. Preliminary fact finding for EKC's addendum 4, the deferred field test effort, was conducted to Sep. Current procurement plans call for this effort to be negotiated in Jan 68. Final fact finding was begun on the Compact Delta 12 schedule and several CCN's.
- 13. A meeting was held with GE at Radnor on 12-13 Sep to review the details of the content of the technical and cost proposal for the deferred effort.

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The SPO outlined to GE our requirements for technical and cost data to be included in the cost proposal. The local Government ACO and Auditor participated in this review. The proposal is scheduled to be submitted on 29 Sep 67.

- 14. The Douglas cost price proposal on the Compact 12 month extension has been received and is being reviewed.
- 15. The 12 month package proposal for McDonnell is in house and negotiations were started the afternoon of 25 Sep.
- 16. Œ's 12 month proposal effort has not been received as yet. Receipt in the SPO is anticipated the week of 2 Oct.

17. MOL Manpower Status

TITLE	AUTHORIZED	ASSIGNED	DIFFERENCE
*OFFICERS AIRMEN CIVILIANS HIGHGRADES CLERICAL	122 6 72 (22) (50)	113 5 68 (19) (49)	-9 -1 -4 (-3) (-1)
	200	186	-14

*MOL Flight Crew included. Six attached officers (4 Navy/Marine Flight Crew, 1 SAC and 1 MAC are not included.)

- 18. Of the 228.4M FY 67 funds received, 228.2M has been initiated.
- 19. Of the 116.4M FY 68 funds received, 115.6M has been initiated.

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