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OFFICE OF THE SECRETARY

MEMORANDUM FOR THE SECRETARY OF THE AIR FORCE

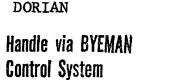
SUBJECT: Manned Orbiting Laboratory Monthly Status Report

The attached Status Report on the Manned Orbiting Laboratory (MOL) Program covers activities through June 30, 1968 and is submitted in accordance with the June 18, 1968 memorandum from the Office of the Secretary.

JAMES FERGUSON

General, USAF Director, MOL Program

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I. PROBLEM

FY 1969 Budget and Program Realignment

On 29 June 1968, General Stewart received oral guidance from Dr. Flax that the MOL Program should structure itself around a planned FY 69 NOA of \$515 million and an expected FY 70 NOA of \$600 million. This guidance was forwarded to the MOL Systems Office along with instructions that within the above NOA the program content would remain unchanged and minimum slippage in the scheduled launch dates of the two unmanned qualification flights and the first all-up manned flight is desired. Subsequent flights will be planned on four to five month launch centers. The Systems Office will convene a scheduling meeting the week of 15 July with the associate contractors to work out the details of this schedule adjustment. The restructuring of the program in accordance with the above guidance is expected to be completed about the end of July.

II. CHANGE PAST MONTH

A. Talking Paper on MOL/AAP Considerations

As a result of earlier conversation between Secretary Clifford and Mr. Webb, Dr. Flax instructed the MOL Program Office to prepare a talking paper on MOL/AAP considerations. The premise of the paper was that severe budget limitations in FY 69 plus general congressional/public criticism of the parallel and apparently duplicative MOL and Orbital Workshop Programs requires that DOD and NASA again assure themselves that the continuation of separate programs is still valid and that the two efforts are as correlated, coordinated, and as cost-effective as possible.

The various sections of the paper described the MOL and AAP (Orbital Workshop portion only) Programs; discussed the possible use of MOL hardware by NASA and the possible use of Apollo/AAP hardware for MOL purposes. The paper concluded that NASA use of MOL hardware in lieu of the orbital workshop would not fulfill key AAP objectives unless the MOL hardware was considerably modified. From the viewpoint

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of the use of Apollo and AAP hardware for MOL purposes, it was concluded that only the Saturn IB in lieu of the T-IIIM might be useful if the hardware were obtained free and if there were no follow on MOL or growth in MOL on-orbit weight.

It was proposed that a gradual unification and closer correlation of the MOL and AAP Programs take place. It was suggested that such unification could be achieved by continuing both the MOL and the Orbital Workshop portion of AAP; by limiting the Orbital Workshop to five or six launches; reorienting the marginal Orbital Workshop experiments to support a possible 60 to 90 day MOL and any future Saturn V sized space stations; and consideration of NASA use of MOL vehicles and Apollos to fulfill the future gap between the Orbital Workshop and the next generation large, long duration space station.

The paper also discussed various management arrangements and concluded with a discussion section which briefly summarized the overall NASA problem and the MOL/AAP interaction. The apparent advantages and disadvantages to NASA and to DOD resulting from a unified program were identified and briefly considered.

B. NASA Interest in MOL.

At the request of Mr. Charles Mathews, Deputy Associate Administrator for Manned Space Flight, NASA Headquarters, a meeting was held at the McDonnell Douglas facility at Huntington Beach on June 25. The purpose of the meeting was to further define information required by NASA to determine the applicability of MOL hardware to the AAP Program. The details of the meeting were worked out by General Stewart and Mr. Luskin, the AAP Manager at NASA Headquarters.

Principals present at the meeting were Major General Stewart, Major General Bleymaier, and Mr. Palley representing AF/DOD; Mr. Charles Mathews, Mr. Harold Luskin and Mr. Douglas Lord representing NASA. Mr. Robert Johnson, McDonnell Douglas also sat in most of the meeting.

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General Stewart's introduction included a brief resume of the events leading to the meeting. He assured the group that the Air Force was prepared to provide any MOL data NASA might request and would be willing to accomplish any additional studies within reason. General Stewart pointed out that because of the program security and contractual constraints, this data could best be obtained by having the appropriate NASA people work very closely with both the Air Force and the Air Force contractors.

Mr. Mathews stated his position by saying that NASA had found it necessary to re-evaluate and revamp their concepts on advanced planning. It was inferred that this action was a direct result of the NASA financial situation. To accomplish this objective, NASA set up a task force to review their future activities and rescope their work. One of the options available for consideration by the task force is the near term extension of manned space flight. In this vein, NASA wishes to look at the capability potentially offered to them by the MOL Program hardware.

The meeting was the first step in getting specific technical data required by NASA to help them examine the applicability of the MOL to long duration (60 to 90 days) on-orbit operations. In response, the MOL Systems Office and Aerospace presented the results of MOL advanced planning activities that concentrated on studies relating to 30, 60 and 90 day operations. The presentations were followed by discussions and a tour of the McDonnell Douglas MOL facilities.

In the afternoon session specific MOL data that is to be furnished NASA was identified; channels of communications established; and arrangements completed for the delivery of the data.

C. Assignment of NASA Representative to MOL.

NASA nominated, and the Air Force has accepted, Mr. Samuel H. Hubbard to represent NASA in the MOL Program Office. Mr. Hubbard will become Technical Advisor and Chief, Technology and Plans Division when he assumes his new duties about the middle of July. He currently is assigned to the Apollo Applications Program Office and

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his previous assignment had been as Special Assistant to the Director, Gemini Program in the Office of Manned Space Flight.

III. CURRENT STATUS

A. Funds.

No further FY 1968 funding action was required during June and the contractors proceeded in accordance with the previously agreed on funding plan.

In response to the Air Force request for an initial FY 1969 release of \$170.0 million, DOD released \$150.0 million. In turn, \$80.0 million has been made available to the Systems Office to fund items deferred from FY 1968 and to sustain contractor efforts during July. Fund releases will continue on a monthly basis until a new schedule is adopted compatible with an FY 1969 NOA of \$515.0 million.

B.

The Systems Office has been studying the possibility of incorporating into MOL

Total estimated cost is approximately \$1.8 million and involves primarily changes to ground and flight vehicle software along with additional simulation effort. The study has been approved to continue at the study/ definition level not to exceed \$100,000. Any effort beyond this level will require a specific proposal describing the work to be accomplished, applicable schedules, and estimated cost to be approved by SAFRD. In the meantime, a brief summary which outlines the operational concept and expected usefulness of this capability will be published at an early date and circulated in the R&D and intelligence community for comment.

C. Image Velocity Sensor.

General Electric has reduced the Itek funding for IVS work to a level commensurate with the termination and wrap-up of the Itek work. Itek had indicated that they could complete a new brassboard model late this calendar

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year which would correct certain deficiencies in their original version. Because the IVS is such a critical item and because of the uncertainties attendant to the work of other contractors, the Systems Office in conjunction with General Electric will determine if Itek can deliver a new brassboard for approximately \$300,000 as previously indicated by Itek. If so, Itek will be authorized to proceed with the work.

IV. FORECAST FOR FUTURE

A. NASA/PSAC Science and Technology Panels Visit

The combined PSAC and NASA Science and Technology Panels will visit McDonnell Douglas Astronautics at Huntington Beach on July 20 for briefings and discussions of the AAP and MOL programs.

The objective of the visitors is to examine the MOL space vehicle for possible AAP purposes. The MOL sessions will be confined to the Secret-SAR level and will not deal with the experimental payload equipment. The mock-up will be appropriately modified and the company presentations will be oriented so as to satisfy this objective.

The MOL Systems Office has been alerted to the impending visit and will arrange, with the contractor, to see that the visit is informative and useful.

B. Program Review Council Meeting

The MOL Program Review Council will meet near the end of July to review program changes necessitated by the reduction in the FY 1969 NOA. The exact date and agenda will not be set until after the scheduling meeting of the week of 15 July is completed.

V. DUE DATE FOR NEXT STATUS REPORT

The next monthly MOL Program Progress Report will be submitted August 7, 1968.

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