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*Col Landall*



FEB 12 1966

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 January 31, 1966, and is submitted in accordance with the December 18, 1965 instructions from the Office of the Secretary.

*for* SIGNED *by Gen Evans*  
B. A. SCHMIDT  
General, USAF  
Director, MOL Program

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I. PROBLEMS

A. Schedules

During recent weeks, Eastman Kodak Company has consistently taken the position that availability of first flight model optics (FM-1) will establish the earliest possible flight date for MQL flight No. 4 in January 1970. Dr. Flax was advised during his January 20 visit to Rochester that the present baseline development schedule for DORIAN will not support flight of FM-1 before February/March 1970.

Top MQL management has expressed the view that this schedule can and must be compressed. Dr. Flax has directed SAFSP to develop a less conservative schedule which provides for flight of FM-1 at least six months earlier. This schedule, with its technical and financial implications, is to be presented during the monthly MQL Program Review on February 5.

B. Eastman Kodak Facility Requirements

As a result of review of the proposed facility plan to support the development and production of the DORIAN sensor subsystem at Eastman Kodak the DNRO advised SAFSP that the terms for constructing Government financed buildings on contractor-owned property were unacceptable. Subsequent correspondence and discussions with the contractor and SAFSP personnel has resulted in the DNRO proposing that a contract be negotiated providing for the Government to lease the contractor-owned property with an option to buy. This proposal is presently under consideration by the contractor and an early agreement on this matter is anticipated.

II. CHANGE PAST MONTH

A. In last month's status report it was reported that action had been initiated to obtain an increase in the FY 67 Military Construction Budget of \$4.1 to cover additional costs of the Initial Launch Capability (ILC) at WTR for the Titan III/MQL configuration. The Director of Budget, Office of the Air Force Comptroller, determined that the \$4.1 million cost for MQL peculiar alterations will be included in the cost of the basic construction of the complex and funded from FY 66 Military Construction funds.

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B. The FY 66 Military Construction Program included \$4.0 million for purchase of the Sudden Ranch (south of Vandenberg AFB) on which the MQL ILC would be constructed. The Government's valuation (Corps of Engineers) of this property amounted to \$3.84 million. Mr. Sudden has stated his independent appraisal is "considerably more than twice" the Government appraisal and the District Engineer, who is conducting the negotiation with Mr. Sudden believes he will ask for approximately \$12 million for the property. Action has been initiated to file condemnation proceedings on the property and title can be obtained in about 10 days after the Government posts a collateral of \$3.84 million. Final price negotiations may result in lengthy litigation proceedings. Bids have already been solicited for site preparation for the ILC.

C. On January 18, the Assistant Secretary of the Air Force/Financial Management approved and directed implementation of special white financial procedures for MQL. These procedures, in conjunction with companion black financial procedures approved in November, 1965, provide a complete streamlined funding procedures structure compatible with the special management structure developed for the MQL Program.

D. On January 21, the MQL Program Office gave a DORIAN-LEVEL MQL briefing to Senator Clinton Anderson, Chairman of the Senate Aeronautical and Space Sciences Committee and Mr. V. Girardi of the Committee Staff. Senators Smith, Symington, and Stennis were expected to attend, but were detained by other business. The following were the major areas emphasized in the briefing:

1. To demonstrate that MQL presently has only a single mission, i.e., reconnaissance, and that therefore it is difficult, if not impossible, to discuss MQL objectives in other than BYEMAN channels.
2. Remind the Senator of the covert nature of the BYEMAN system, in accordance with the request of General Stewart, who briefed Senator Anderson a few days earlier.
3. To demonstrate that there is no duplication of experiment objectives between the Apollo Applications Program and MQL.
4. To prove that NASA participated extensively in the concept forming stages of MQL and that the system chosen is the result of thorough analyses supported by NASA.
5. To reassure the Senator that the MQL system capitalizes as much as possible upon the wealth of knowledge and hardware that the nation has accumulated in space technology, especially manned space flight experience and systems developed by NASA.

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Page 2 of 5 pages  
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The Senator had questions pertaining to the starting of ILC construction prior to purchase settlement of the Sudden Ranch, the use of the Saturn IB or Saturn V launch vehicles for MCL, the use of the Apollo for the laboratory vehicle, and the training of MCL flight crews at the Air Force Aerospace Research Pilots School rather than at NASA training facilities. Attached are the specific questions and answers at this briefing.

E. On January 7, 1966, Dr. Flax and Colonel Allen of SAFSP briefed a part of the Reconnaissance Panel of the President's Scientific Advisory Committee. The meeting was informal, having been called in substitution for a formal meeting scheduled the same date. Present at the meeting were Drs. Hornig, Land, Purcell, Garwin and the recording secretary, Dr. Steininger. The principle purpose of the meeting was to review the efforts underway in the Air Force as a consequence of previous PSAC guidance to automate the MCL mission module. Colonel Allen reviewed the status of development of the various subsystems needed to perform man's functions. The Reconnaissance Panel representatives appeared satisfied that the Air Force had been responsive to PSAC's desire to design the MCL mission module from inception for completely automatic unmanned operation.

F. You will recall that the result of a preliminary analysis of recovery operations of a MCL "abort from powered flight" of a man launch south from Vandenberg showed the desirability of a down-range aircraft staging base. Henderson Island, a British Possession in the Pitcarin Group, appears to be the most suitable location. The Commander of National Range Division has been requested to make arrangements for a Site Survey Team to visit Henderson Island and study various ways of providing the most effective MCL abort support capability.

G. Briefings and discussions with Dr. Flax of the MCL SIGINT Study Program during the period 14 through 24 January have resulted in the preparation of MCL Program Office Directive 66-1. Upon approval by the DNRO, this directive will provide for an Electromagnetic Pointing System for use with the large optical sensor [REDACTED]

[REDACTED] Analysis of the [REDACTED] data from an Orbital Collection Program will furnish the basis for system studies to be initiated at a later date.

H. The MCL Program Office (SAFSL) has prepared and forwarded for approval a request for release of \$40 million of deferred MCL FY 1966 funds for extension of engineering definition activities and for procurements required to protect program lead times. Specifically, these funds are required to:

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Page 3 of 5 pages  
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1. Sustain the Laboratory Module and Gemini B contractors at their current levels of effort through June 30, 1966.
2. Continue design, procurement of initial long lead items, and industrial facilitization for the DORIAN sensor package.
3. Continue development of the Titan III seven-segment solid rocket motors and Stage I liquid engine.

I. The MQL Program Office provided a DORIAN-level briefing of the MQL Program to Dr. Mueller, Associate Administrator for Manned Space Flight, NASA, and several of his staff. The purpose of the presentation was to acquaint Dr. Mueller with the program objectives and a current status of the program. Dr. Mueller expressed concern over possible schedule conflict of MQL usage of Apollo developed subsystems but was assured that our procurements were follow-on to Apollo lunar program requirements and were in an excellent phase relationship so as to take advantage of the contractors' going production capability.

J. A proposed action to request the assistance of the Deputy Secretary of Defense in obtaining the assignment of Category 8 (Brick-Bat .01) military urgency designator and BX industrial priority for the MQL Program has been submitted to Dr. Flax. Because of the urgency of the MQL effort and the potential competition for resources between MQL and NASA Apollo and other Air Force programs, a top national priority for MQL is felt to be justified. Because of the covert nature of the payload part of the program, it was recommended that a top management level AF/OSD review and action procedure was justified in lieu of the conventional approval channels through AFSS, Air Staff and JCS before obtaining OSD consideration.

### III. CURRENT STATUS

#### Sub-Contracts

As a result of the Douglas Company evaluation of contractor proposals for the Data Management System, a selection of IEM was made and presented to the MQL Systems Office. However, an Air Force/Aerospace review of the Douglas evaluation did not show a conclusive superiority of the IEM proposal over Univac. IEM's overall point rating under the Douglas rating system was 76.26 where Univac's rating was 74.98. IEM had a better technical proposal, but their estimated cost was \$32.0 million versus Univac's \$16.8 million. It was decided that it would be advisable to award a Phase I Study Contract to both IEM and Univac and thus be able to make a more conclusive selection of a sub-contractor based on more specific technical data and substantive cost information. The carrying of an additional sub-contractor through the remainder of Phase I will cost approximately \$400 thousand more on the Douglas Phase I contract.

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Page 4 of 5 pages  
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**IV. FORECAST FOR FUTURE**

A. A meeting of the MCL Policy Committee has been scheduled for 1430 on 8 February. The purpose is to review the substance of the briefings to be presented to the PSAC on 9 February. The agenda for the PSAC meeting is as follows:

Introduction:	Dr. Flax or General Schriever
General Considerations and Requirements:	General Berg
Results of Manned/ Unmanned Studies:	Dr. Leonard
Sensor Technical Considerations:	Colonel Allen
Sensor Development Status:	Colonel Knolle
New Orbiting Control Vehicles:	Mr. Tennant
Dump Truck Versus In-Line Configuration:	Colonel Knolle
New MCL Schedule and Conclusions:	General Berg

It is estimated this briefing will take five hours, not including time for discussion.

B. The originally scheduled MCL hearings for 31 January before the House of Representatives Committee on Aeronautics and Space Sciences (Miller Committee) has been rescheduled for February 8. Dr. Flax and General Schriever are the principal witnesses.

**V. DUE DATE FOR NEXT STATUS REPORT**

Next monthly MCL Program Status Report to be submitted 7 March 1966.

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