

~~SECRET~~

HANDLE VIA BYEMAN SYSTEM ONLY

DEPARTMENT OF THE AIR FORCE
WASHINGTON

NOTED BY THE
SECRETARY OF
THE AIR FORCE

OFFICE OF THE SECRETARY

AUG 4 1966

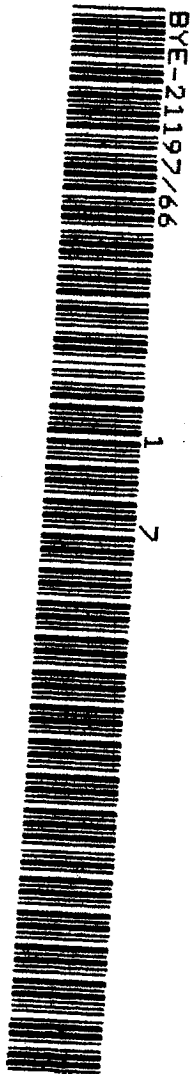
MEMORANDUM FOR THE SECRETARY OF THE AIR FORCE

SUBJECT: Manned Orbiting Laboratory Monthly Status Report

The attached Status Report on the Manned Orbiting Laboratory (MOL) Program covers activities through July 31, 1966, and is submitted in accordance with the July 18, 1966 instructions from the Office of the Secretary.

Harry P. Evans
for B. A. SCHRIEVER
General, USAF
Director, MOL Program

1 Atch
a/s



07

DORIAN

Page 1 of 1
Copy /
SAF-SL BYE 21197-66

EXCLUDED FROM AUTOMATIC REGRADING;
DDG DIR 5200.10 DOES NOT APPLY

HANDLE VIA BYEMAN SYSTEM ONLY

~~SECRET~~

~~SECRET~~

HANDLE VIA BYEMAN SYSTEM ONLY

I. PROBLEM

FY 1967 Funding Limitation and MOL Program Schedules

Because a lower level of funding is anticipated for FY 1967 than required to meet stated program schedules and objectives, an early determination is required on the rate and level of effort for proceeding with system engineering development. The Director, MOL, by memorandum for the Secretary of the Air Force on July 20, 1966, recommended that the MOL Program proceed until January 1, 1967 at a rate and level of effort which supports the documented Program Plan. By January 1967 the program requirements and schedules would be reassessed based on the progress being made and the rate of expenditures experienced. At that time appropriate adjustments or requests would be made commensurate with availability of FY 1967 and FY 1968 funds. A timely decision on this matter is necessary in order to pursue program direction and contract negotiations on an orderly and productive basis.

II. CHANGE PAST MONTH

A. MOL Manpower Requirement

The Director, MOL, in a memorandum for the Secretary of the Air Force dated July 5, 1966, requested the Secretary's assistance in obtaining additional manpower spaces to support the MOL Program. In lieu of additional spaces, the Director, MOL asked for reallocation of the AFSC spaces identified for deletion in FY 1967 under the manpower reduction directed by OSD. The SAF has the request under consideration.

B. DORIAN Briefing to Senator Cannon

On July 1, General Evans briefed Senator Cannon of the Senate Armed Services Committee. The briefing, which included overall program status, mission objectives, technical configuration, schedules and funds, was given to keep Senator Cannon current on MOL Program progress.

C. Briefing to Secretary of Defense

On a visit to the West Coast on July 7, Secretary McNamara received a comprehensive briefing on the MOL Program. Significant comments which pertained to the objectives of the program were discussed.

DORIAN

Page 1 of 5 pages
Copy /
SAF-SL BYE 21198-66

~~SECRET~~

~~SECRET~~

D. MOL Ocean Surveillance Mission

The Navy briefed their proposed Ocean Surveillance mission to the MOL Policy Committee on July 13. The Committee gave their support to the Navy for presenting their mission plan to DDR&E requesting approval to undertake the Contract Definition Phase. It was suggested that Contract Definition Phase objectives be defined in greater detail prior to presentation to DDR&E.

Dr. Foster and members of his staff were briefed on July 20. A decision to approve entry into contract definition was withheld pending the results of a follow-up presentation which is being prepared to answer specific questions asked by Dr. Foster. The questions centered primarily on the requirement for Ocean Surveillance and an alternate booster/orbital vehicle combination to perform the mission.

E. Air Force Council Briefing

On July 14, General Evans briefed the Air Force Council on the MOL Program. The briefing covered the evolution and status of the program, mission objectives, baseline configuration and capabilities, schedules, and problem areas.

F. Titan IIIM/MOL Support of NASA Apollo Applications Program

A letter from NASA to DoD dated June 17, 1966 requested detailed data regarding use of Titan IIIM/MOL hardware for the NASA Apollo Applications Program. The information is required by NASA for use in responding to a Bureau of Budget query. A report which presents the requested data was prepared by the MOL Systems Office and the Titan III SPO and was submitted to DDR&E on July 14 for transmittal to NASA.

G. Briefing to Messrs. Vance and McNaughton

At the request of the Secretary of the Air Force, General Evans presented Messrs. Vance and McNaughton a MOL DORIAN briefing on July 14. Dr. Flax was in attendance for the briefing.

H. Electromagnetic Pointing System Study

A Technical Development Plan and briefing have been prepared showing the configuration, use and integration requirements for inclusion of this capability in the baseline MOL laboratory vehicle. A decision for including design provisions for the EPS in the MOL baseline design will minimize the cost of design changes at a later date.

DORIAN

Page 2 of 5 pages
Copy /
SAF-SL BYE 21198-66

~~SECRET~~

~~SECRET~~

HANDLE VIA BYEMAN SYSTEM ONLY

I. MOL Presentation to the President's Space Council

On July 21 General Evans presented a DORIAN review of the MOL Program to the Space Council chaired by the Vice President. The only significant discussion pertained to the objectives of the MOL Program which Secretary of Defense McNamara reiterated for the benefit of the Vice President.

J. DORIAN Briefing to Mr. Preston

Mr. Preston, Staff member of the House Appropriations Committee, was given a MOL DORIAN briefing by the MOL Program Office on July 25. General Crow and Mr. Fine, AFABF, were in attendance at the briefing.

K. CER-VIT Mirrors for DORIAN

A contract has been negotiated and authorization granted to Owens-Illinois to proceed with additional facilities equipment to provide 72-inch CER-VIT mirrors for DORIAN. The \$1.2 million required in FY 1967 for these additional facilities is being funded under the SAFSP Applied Research/Advanced Technology Program. An additional \$2.0 million in FY 1967 for development of the 72" mirror is being funded under the MOL Program.

L. PSAC Briefing

The MOL briefing to PSAC scheduled for August 1 and 2 was cancelled at the request of PSAC and is expected to be rescheduled in approximately two weeks. The agenda was to have included MOL Program status, baseline MOL configuration and effectiveness factors, results of the unmanned DORIAN system studies, and a manned/unmanned system comparison.

III. CURRENT STATUS

A. MOL Contract Negotiation Status

A review of the status of contract negotiations by the MOL SPO with General Schriever and General Evans on July 27 revealed that the contract evaluation and negotiation efforts were approximately one month behind schedule for Douglas, General Electric and McDonnell. The negotiations with Eastman Kodak for the DORIAN effort have recently been completed and approval has been given by Dr. Flax to sign the contract. Negotiations of follow-on effort with Titan IIIM associate contractors is not scheduled for several months yet and no

DORIAN

Page 3 of 5 pages
Copy /
SAF-SL BYE 21198-66

~~SECRET~~

~~SECRET~~

HANDLE VIA BYEMAN SYSTEM ONLY

delay is anticipated. The primary cause for delay with Douglas, General Electric and McDonnell has resulted from these contractors having to resubmit their cost proposals based on the revised MOL Program schedule, Option 6, which was decided upon in May. Douglas, General Electric and McDonnell have made it a condition of their contract proposals that a DX priority for material procurement will be provided. The contractors have advised the System Office that they cannot give assurance of meeting program schedules without the DX priority. The Deputy Director, MOL has been instructed to proceed with negotiations on the basis that a DX priority will be assigned to the program.

It is anticipated that the Douglas and McDonnell contracts may be negotiated by mid-September with the GE contract no sooner than October 1. The Eastman Kodak cost-plus-fixed-fee contract was negotiated for \$243.1 million, which is \$29.1 million greater than the MOL Program Office estimate. The increased cost was predominantly an increase in Aerospace Support Equipment (ASE) required to support the DORIAN production. Under the terms of the contract, continued reviews and refinements will be made by the government as specific requirements are identified. The government's liability will be limited to those funds allotted to the contract from time to time and to special termination costs in the event of contract termination.

B. Air Force Experiments for NASA Saturn IVB Workshop

The NASA S-IVB Workshop program, currently planned by NASA for Saturn IB flight AS-209 in the first quarter of CY 1968, involves pressurizing the S-IVB hydrogen tank so that astronauts can work inside in a shirt-sleeve environment during a 14-30 day mission. The Ad Hoc group, which was established to define a proposed package of MOL supporting experiments, has selected six experiments for this program. Briefings on the proposed Air Force participation have been presented to Dr. Flax, Mr. Kirk and Mr. Fink. General Evans presented the proposed Air Force experiments as an informational item at the July 25 meeting of the MSFEB. Work is continuing within the Air Force to obtain approval and FY 1967 funding for the experiments.

C. MOL Abort Recovery Aircraft Staging Base

The site survey party to determine the feasibility of establishing a MOL launch abort recovery aircraft staging base on Henderson Island has completed their on-site survey. The survey team left Henderson Island on July 30 and are expected to arrive in Hawaii about August 10. The party reported that the desired facility can be built in time to meet MOL launch schedules if funds are provided in the FY 1968 Military Construction budget. Sufficient data has been obtained by the survey team to allow for final design of the facilities.

DORIAN

Page 4 of 5 pages
Copy /
SAF-SL BYE 21198-66

~~SECRET~~

~~SECRET~~

HANDLE VIA BYEMAN SYSTEM ONLY

D. Unmanned Comparison Study

The report on comparison of MOL to an unmanned system of resolution has been revised and is nearing completion. When completed, the report will be submitted to the DNRO for review.

E. MOL Fund Status

Obligation Authorities issued during July 1966 for MOL efforts totaled \$11.0 million. This raises the total of funds released by the MOL Program Office since program approval in August of 1965 to approximately \$108.0 million. In addition to the released MOL funds, \$25.8 million FY 1967 Program 624A funds were released in July to the Titan III SPO for development of the seven-segment 120-inch solid motor and the development associated with increasing the core Stage I engine nozzle expansion area ratio to meet MOL payload requirements.

IV. FORECAST FOR FUTURE

A. Continuation during August of contract evaluations and negotiations with Douglas, General Electric, and McDonnell on the contractors' Phase II proposals.

B. Submission during August to the DNRO of the report on comparison of MOL to an unmanned high resolution reconnaissance system.

C. Briefing to PSAC during August to include results of the unmanned DORIAN system studies.

D. Management decision on the rate and level of effort for proceeding with the MOL engineering development.

V. DUE DATE FOR NEXT PROGRESS REPORT

Next monthly MOL Progress Report to be submitted September 7, 1966.

DORIAN

Page 5 of 5 pages
Copy /
SAF-SL BYE 21198-66

~~SECRET~~