

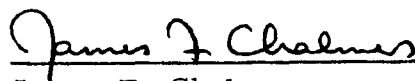
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MOL MONTHLY PROGRESS REPORT

For

1 October 1968 through 31 October 1968



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1.0 GENERAL

As during September, major effort during the month of October was directed toward technical preparation for contract negotiations on the supplemental agreement.

2.0 LOADS

Further work has continued on Load Cycle 4. This work has been principally in the following three areas:

Model revisions, i. e., localized forward mount stiffness change, head to barrel relative stiffness change, and recent barrel skin modifications have been defined and are due from the associate on 20 November. These data will be utilized in the preparation of a revised dynamic model and subsequent calculation of associated modes.

GE, based upon the more refined definition of their equipment, has requested 11 new additional points for relative displacement determination. These points have resulted from the integration of their requirements with all involved associates. MDAC-WD is preparing the new relative displacement transform matrix for submittal to MMC.

It has been noted that an increase of cant angle of the Stage 1 engine sub-assemblies will reduce the OV moments and overall lateral loads significantly. An approximate change of -10% in load has been reported for a cant angle of increase 3-5 degrees. Ultimately a new OV Stage 1 shutdown load condition analysis based on a selected cant angle will be required.

3.0 ALIGNMENT

A tentative agreement has been reached with General Electric on aligning the system by means of the flight alignment monitoring system (FAMS). General Electric is currently working with Eastman Kodak

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3.0 ALIGNMENT - Continued

on the interface of the alignment system. The current plan is to use reflecting surfaces (cubes and prisms) on the back of the mirror. It is expected that the entire interface will be worked at the upcoming TSOM #8.

4.0 IMAGE VELOCITY SENSOR

The engineering prototypes were received by General Electric from both Goodyear and Hycon. Evaluation of prototypes has commenced and adjustments are being made. No particular problems have been incurred other than the normal developmental changes.

A change is in the process of being negotiated in the specification for the IVS so that there will be more transmission of useable energy through the system. The delivered units were manufactured to the old specification and part of the adjustments being performed are to bring the instruments into the new specification range. The latest estimate of brightness has been delivered to General Electric in order to provide them with typical scene brightness and modulation. The information expands the definition in the specification in order to make the specification more easily interpreted. General Electric has requested further details on spectral information which will be provided to them as soon as it is possible to determine the figures.

5.0 FLIGHTS 6 AND 7

Interface documentation was reviewed and updated during Flights 6 and 7 Technical Signoff Meeting (TSOM) #2 held at MDAC - WD, 28 October 1968 through 1 November 1968. The interface documents will be 75 percent complete by the System Design Review (SDR); the remaining 25 percent is mainly composed of design data that will not be generated until Phase II.

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5.0 FLIGHTS 6 AND 7

Incremental System Design Review Meetings were also held. These meetings were utilized for an in-process review of the System Level Specification Tree, hardware list, draft versions of the Ground Test Plan - Part I, and technical comments to the SAFSL Exhibits pertaining to Flights 6 and 7.

Contractor inputs and revisions to the SP/DR (SS-MOL-1B) as a result of Flights 6 and 7 Phase I have been reviewed. Comments were returned to MDAC-WD for incorporation in Phase II.

6.0 ADVANCED DATA SYSTEM (ADS)

The Aerospace Operations Directorate has been working to provide Satellite Control Facility (SCF) with the MOL requirements. This effort was originally scheduled to be accomplished approximately six months later in time but the situation required that the material be provided immediately. It will now be necessary to work closely with SCF in order to avoid misinterpretation of MOL requirements, to evaluate alternate proposals to satisfy these requirements and to understand and react to the final proposal.

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