

~~TOP SECRET~~  
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HANDLE VIA  
**BYEMAN**  
CONTROL SYSTEM

~~TOP~~ NATIONAL RECONNAISSANCE OFFICE  
WASHINGTON, D.C.

OFFICE OF THE DIRECTOR

31 OCT 1966

MEMORANDUM FOR THE DIRECTOR OF RECONNAISSANCE,  
CENTRAL INTELLIGENCE AGENCY

SUBJECT: TRW Tasks for Hexagon

Reference: BYE 52700-66, dated October 10, 1966, which provided FY 1967 program approval for the Hexagon sensor.

In the referenced memorandum, paragraph 4 addressed TRW "system engineering" task considerations, and limited October 1966 effort so as not to exceed [REDACTED]

Since that time, several discussions have been held with SSPO personnel, and additional material has been furnished, which included explanations of the intended use of an average of 87 MTS.

With specific reference to the chart included in the material furnished headed "Systems Engineering and Technical Support Contractor Technical Manloading," my reactions are as follows:

1. The blocks of 2 for Program Management and 1 for Field Operations are approved.
2. The block of 12 for the Computation Center is tentatively approved at 6, on the basis that necessary computer support has not yet been defined.
3. The block of 16 for Systems Requirements and Operations Analysis is tentatively approved at 4. The relationships of the TRW and Agency roles in requirements analysis and performance evaluation, and in operations analysis and software, to the SPO and SOC roles and needs will require additional refinement. For example, there are questions as to assignment of responsibilities for the listed tasks of

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HEXAGON

HANDLE VIA  
**BYEMAN**  
CONTROL SYSTEM

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analysis of user requirements, definition of system requirements, allocation of requirements budgets, analysis of operating strategies, definition of software flow and requirements, and preparation of operational software.

4. The block of 29 for Sensor AVE project engineering is tentatively approved at 20. While this limitation does not involve specific questions on the listed tasks, it is believed that the tasks are not necessarily concurrent, and that a lower number of average MTS should be initially assigned, subject to later re-evaluation.

5. The block of 16 for System Design Analysis is tentatively approved at 11. In this instance, there are questions as to appropriate responsibilities for vehicle thermal analysis and SBA thermal requirements; structures, dynamics and mass properties; and performance analysis. Under the listed tasks, there is a specific question on a role for TRW on aerodynamics and reentry performance analysis in view of the approved management plan for this system.

6. The block of 19 for System Integration is tentatively approved at 15. While the listed tasks are not specifically questioned, it is believed that a lower number than 14 for electrical and mechanical integration should be a starting point, subject to later re-evaluation of future need.

7. This equates to a tentative approval of 59 average MTS. However, it is noted that the block numbers added to a total of 95 vs. an 87 MTS average. Accordingly, there appears to be some inherent flexibility in the average MTS allowances herein. The above rationale for MTS approval is not intended to limit your flexibility to make needed adjustments by tasks within the overall total.

8. As indicated, these approvals are tentative in nature, but do provide a basis for proceeding with the required effort. It is expected that within the next two months the roles and responsibilities of the SPO, the SSPO and TRW will be clarified, and that scope and scheduling of SOC support requirements will be better defined. In the meantime, if an unexpected problem develops on TRW MTS, and an urgent special consideration is necessary, it will be treated expeditiously.

The preceding tentative MTS approvals do not increase the FY 1967 fund approval in BYE 52700-66, as indicated by the wording of paragraph 5 therein.

*Alexander H. Flax*

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*10/16/66*