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0-36-600327-2

21 September 1966

Dear Lou,

In view of your recent statement that the Hqs Technical Monitor should review all equipment modification and/or work proposals, I am forwarding a number of engineering investigation resumes, relative to the Type II system, for your approval. An early approval is considered necessary to insure the optimum performance and reliability of the Type II equipment. Those items which we recommend for an early approval are:

- l. Main Window Retrofit: Type II concurs with report SP-993 and strongly recommends that the present window assemblies be returned on a rotational basis for rework and installation of the new gasket. (See Attach. 1)
- 2. <u>Configuration Exposure V/H Programming</u>: Recommend that the Programmer Module be redesigned to allow for programming changes after the package has been installed. (See Attach. 2)
- 3. Ground Pre-Conditioning Equipment: Recommend that one additional set of Type II ground pre-conditioning equipment be procured. (See Attach. 3)
- 4. <u>Cage Status Indication:</u> Recommend that the frame cage status modification be incorporated in the Type II system. (See Attach. 4)
- 5. <u>Isolator/Stabilizer Unit</u>: It is recommended that Task I be approved to review structural reinforcement of the Isolator/Stabilizer system. Task II, Stabilizer electronic improvement and gyro replacement, should be deferred pending evaluation of Task I. (See Attach. 6)

Much of the recommended engineering work could be covered by the present 0-TM-483 budget and would not require additional funding.

Also of major concern is the return of the $S/N\ 2$ configuration (Ref. message 4747). There is not only updating modification work to do, but we have now exceeded the 100 hour elapsed time period when the equipment should be returned for preventive maintenance M & O work. We will soon reach the point when we can no longer guarantee the reliability of this unit. In addition, should the return of the $S/N\ 2$ unit be delayed until next year, the time-cost estimate mentioned in message 4747 will have to be increased as in-house technical

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personnel are becoming involved in other projects due to the lack of Type II program work.

Finally, I would like to repeat my comments made to John P. and you about 6 months ago after the Type II package was Area validated and put on standby status. My concern is that the configurations have never been thoroughly tested in the technical sense of the word. Until such time that Article/Driver performance testing is complete and we can schedule controlled tests for the sole purpose of configuration testing, much of our evaluation and modification must be based on hypothetical data. I can only look forward to that day when all systems can be tested in a manner which will bring their output to the design maximum.

REG: bab

8 Attachments:

- 1. Main Window Retrofit
- 2. Configuration Exposure V/H Programming
- 3. Ground Pre-Conditioning Equipment
- 4. Cage Status Indication
- 5. Continuous SC&DM Recording of V/H
- 6. Isolator/Stabilizer Unit
- 7. Use of UTB (SO-380)
- 8. Type II Color Capability

cc: John P. 🗸

Regards,

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