

MEMORANDUM FOR: E. A. Burkhalter
Director, Intelligence Community Staff

FROM:
Acting Director, Office of Assessment and Evaluation

SUBJECT: Intelligence Requirements for Manned Space Station Activities

(b)(3)

1. Action Requested: Your approval of the recommendation contained in paragraph 5 is requested along with your signature on the attached memoranda which implement that recommendation.

2. Issue: How, and in what forum, is the Intelligence Community to participate in the formulation of requirements for a U.S. program for manned space station activities?

3. Background:

- The SIG (Space) Manned Space Station (MSS) Working Group has recently been formed.
- Its function will be to advise SIG (Space) on what policy issues must be identified and resolved in order to establish the basis for an Administration decision on whether to proceed with the development of a permanent manned space station. In the process of accomplishing this the Working Group will, among other things, review the mission requirements (scientific, technology applications, commercial, national security, etc.) for such a manned space station program at NASA.

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- NASA, with some DoD financial assistance, has efforts ongoing with eight U.S. aerospace contractors to explore the potential requirements for a manned space station. These studies cover the scientific, technological, and commercial requirements, both for the U.S. and any potential foreign market. The contractors have also been tasked to address national security requirements on a very limited basis. While inputs so far have ranged from Secret to Top Secret in security classification, little if any input dealing with potential intelligence applications has been generated.
- Past NASA internal studies on the manned space station have emphasized commercial and foreign utilization and have had no input from the Intelligence Community.
- The USAF Manned Orbiting Laboratory (MOL) Program in the 1960s was predicated upon the limited, but unique, role man could play in space by directing high resolution photographic operations from a satellite. The DCI consistently questioned the intelligence value of the MOL program, its proposed products, and the utility of man in the system. No SIGINT requirements were formulated for the MOL before the program was terminated.
- Neither CIA nor DIA (Nor the IC Staff and its Collection Committees) have conducted requirements surveys for manned space activities other than the recent STS-related inquiries.

4. Alternatives: Among several possible alternatives, two which bound the problem are:

1. The Intelligence Community, through its Collection Committees, and in conjunction with the National Reconnaissance Office, will define a set of intelligence requirements for the NASA Manned Space Station Program.

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Good!

a. The requirements so defined will be provided to the MSS Working Group in parallel with those from NASA and DoD studies. The requirements will specify that if the DoD and the Intelligence Community participate in Space Station activities, they will have to have priority over civil and foreign participants. Without this major voice in systems concept and operations, it is likely the space station design will be suboptimized for any national security applications.

b. The intelligence requirements, because of their security sensitivity, will be provided to NASA at a top management level and not be reflected in MSS Working Group activities.

2. The Intelligence Community will inform the MSS Working Group that it feels it is premature for it to state its MSS requirements until NASA better defines MSS system architecture and basic configuration.

Discussion:

The Intelligence Community has never developed any over-riding requirements for the use of man in an orbiting, long duration intelligence collection platform. Specific requirements, except for the high resolution photo system on MOL, have never been generated in a formal manner. Because of the previous lack of enthusiasm and requirements definition, some in the Intelligence Community conclude that there are no significant, unique intelligence requirements for the MSS and that the Community would be best served by delaying any requirements statement until NASA has more fully defined the MSS concept. There is the belief that, until NASA determines such basics as the number of MSSs to be deployed, the orbits involved, the relationship of potential intelligence activities to other U.S. civil and commercial activities (as well as foreign activities should they be present), the extent of an orbital transfer vehicle (OTV) capability, etc., the intelligence requirements would not present a forcing function on system definition.

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On the other side of the issue, there are those who feel that unless the Intelligence Community examines and defines its requirements, no matter how limited, NASA will proceed with system design in such a way as to preclude productive intelligence participation at a future date. They suggest that the Intelligence Community needs to undertake a relevant requirements survey and, depending upon the security sensitivity of the results, convey the requirements to NASA through the MSS Working Group or through top management. NASA's current procedure for MSS design is to determine and collate all requirements prior to embarking on any kind of system definitions. Without any Intelligence Community input, NASA may attempt to hypothesize intelligence requirements with inappropriate results, both in terms of the requirements themselves and the extent of implied Intelligence Community backing for the MSS. The original Shuttle architecture, as proposed by NASA, did not adequately satisfy DoD/Intelligence security needs. As a result a considerable amount of additional funding was required later to correct these deficiencies in the Shuttle architecture.

5. Recommendation: Support Alternative 1a.

The Intelligence Community, through its Collection Committees and in conjunction with the NRO, will conduct a brief MSS requirements survey. The results, which may be limited in scope, will be incorporated into the MSS Working Group activities as a subset of the classified requirements section (which will also include classified military, non-intelligence needs).

This alternative provides the intelligence community a clear opportunity to go on record defining the specific content and limits of its requirements for manned space station activities. Without them NASA will be inclined to extrapolate its contractor study results into the intelligence arena with strong potential for inappropriate results in terms of the requirements themselves as well as the extent of intelligence backing for the overall concept.

It is believed that the collection requirements will be limited in scope and compatible with the Working Groups security handling capability. The Working Group is presently capable of handling TS/SI-TK material.

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WORKING PAPER

The potential for operational/support requirements is somewhat less clear and the Intelligence Community, with the NRO taking the lead, will want to ensure that if there are unique requirements, they are expressed accurately and in a timely manner so that they can successfully influence manned space station architecture, configuration, and operating capabilities.

NASA and members of the NSC Staff have indicated that a potential manned space station program has Presidential support and that this is not an independent effort by NASA to evoke interest.

NASA is prepared to present MSS program background briefings to the ICS Collection Committees, and others as required, prior to their involvement in the requirements definition process.

The attached letters to the Chairman of the COMIREX and the SIGINT Committee and the DNKO implement this recommendation. Because the NSC Staff, NASA, OMB and OSTP are beginning to exert pressure to expedite the MSS Working Group activities so that a report to the SIG(Space) can have an impact on the FY 1985 budget cycle, the requirements phase of the study will have to provide inputs to the Working Group by early spring 1983.

APPROVED:

Director/Intelligence Community Staff

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