Space Station Science and Applications Advisory Subcommittee Recommendations

Meeting February 15-17, 1994

Presentation to the NASA Advisory Council April 13, 1994

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SPACE STATION SCIENCE AND APPLICATIONS ADVISORY COMMITTEE RECOMMENDATIONS

1) Support of the Space Station Program Office

• The Space Station Program Office (SSPO) must be supported by the user offices. Resources are needed to provide a presence of user code personnel at the SSPO.

2) Roles and Responsibilities

• Define the roles and responsibilities of the SSPO Science Advisor, including the nature of the interaction between the Chief Scientist for Space Station and the SSPO Science Advisor.

3) Microgravity Requirement

• The appropriate vibroacoustic control plan, a critical item for the definition of the utilization of the space station, remains unclear and requires more analysis. Provide a detailed status report on the development of a vibroacoustic control plan at the SSSAAS Summer Workshop.

4) International Standard Payload Racks

• Re-examine the ISPR agreement and try to achieve physical interchangeability and functional interoperability at both the rack and sub-rack level.

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5) EXPRESS Program

• The SSSAAS strongly supports the EXPRESS concept. This concept should be brought to full fruition for both the EXPRESS rack and EXPRESS pallet. Spacelab Standard Interface Rack (SIR) capabilities should be fully compatible with EXPRESS rack for future utilization in Phase III.

6) Command and Data Handling System

• The SSPO should fully brief the SSSAAS on the capabilities and functionality of the command and data handling system at the SSSAAS Summer Workshop.

7) Attached Payload Accommodations

• A minimum of six attached payload accommodations sites on the truss should be approved by International Space Station Alpha (ISSA). Provide the user community detailed information for sites on the truss and the JEM Exposed Facility at the SSSAAS Summer Workshop.

8) External Contamination Environment

• ISSA should move expeditiously to approve an external contamination monitoring plan, which should consider molecular deposition particles, liquid releases, plasmas, fields, and plumes. Information is particularly important at and around external attach payload points as well as at and around science view ports.

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9) Science Quality Windows

• Include two 20-inch science quality windows on ISSA. The highest priority is for a nadir viewing window; the second highest priority is for a zenith viewing window.

10) Exchange of ISSA Assets and Capabilities with Russians

• In coordination with NASA user offices, agreements on sharing and access should be negotiated with the Russian partners at the earliest possible date. The agreements should be similar, in both principle and practice, to those negotiated with the European, Japanese, and Canadian partners.

11) Russian Design Requirements

• Provide a presentation at the SSSAAS Summer Workshop describing: agreements with Russia, Russian hardware, and operational procedures which may affect previously planned U.S. utilization.

12) Russian Participation in SSSAAS/IFSUSS

• Russian participation in the 1994 SSSAAS Summer Workshop should be in the form of "observer". The Russian invitees should be broadly representative of their communities, and should be prepared to present material directly relevant to the Space Station science and applications focus of SSSAAS.