NASA Advisory Council Recommendation

Decadal Survey on Biological and Physical Sciences in Space 2011-02-05 (EC-04)

Recommendation:

NASA should appoint an Associate Administrator for the Life and Physical Sciences, charged with appropriate responsibilities and authority to ensure that integrated, coordinated, and sufficient approaches to these areas are achieved in order to support the needs for future human space exploration and to foster science developments that further the Nation's role as a leader in space-related science.

Major Reasons for the Recommendation:

The budgetary consequences of the Exploration Systems Architecture Study (ESAS) process had major negative consequences on the physical and life sciences, both within NASA and in the external research community, yet advances in these areas are essential for the future of human space exploration. The Council endorses the content of the decadal report and wishes to specifically endorse the need for an integrated approach to research in the life and physical sciences within NASA, one that is supported by stable and sufficient funding that fosters advances not only within the Agency but also within the external research community. In order to foster the necessary integration and emphasis within NASA, the Council believes that a senior level administrator (i.e., Associate Administrator) is needed to manage and represent the life and physical sciences initiatives within NASA.

Consequences of No Action on the Recommendation:

We will not have an integrated, coordinated approach to support human space exploration. In addition, we will not maintain the Nation's role as a leader in space-related science.

NASA Response:

NASA agrees that "the need for an integrated approach to research in the life and physical sciences within NASA" is essential. In the planned merger of the Space Operations Mission Directorate and the Exploration Systems Mission Directorate, which will result in the Human Exploration and Operations Mission Directorate, all research will be managed under the auspices of a single research division (See Figure 1). The Space Life and Physical Sciences Research and Applications Division will be headed by a person of high academic standing and will coordinate the research portfolio development with the Agency's Chief Scientist. Additionally, the non-profit organization that will coordinate non-NASA research with the external community will also work in close coordination with this division and the Chief Scientist to avoid unplanned redundancies in the research portfolio.



Organizational Structure: Human Exploration and Operations Mission Directorate

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Figure 1

MPCV = Multi-Purpose Crew Vehicle

SFCO = Space Flight Crew Operations

ISS Nat'l Lab Mgt.

O&M = Operations & Maintenance

MAF = Michoud Assembly Facility

RPT = Rocket Propulsion Test

SLS = Space Launch System

MOD = Mission Operations Directorate