INTERNATIONAL SPACE STATION

Measurable Performance Targets and Documentation Needed to Better Assess Management of National Laboratory

Why GAO Did This Study

The U.S. has spent almost $43 billion to develop, assemble, and operate the International Space Station (ISS) over the past two decades. The NASA Authorization Act of 2010 required NASA to enter into a cooperative agreement with a not-for-profit entity to manage the ISS National Laboratory and in 2011 did so with CASIS. CASIS is charged with maximizing use of the ISS for scientific research by executing several required activities. Recently, questions have arisen about the progress being made to implement the required activities and the impact it has had on ISS’s return on the investment.

GAO was asked to report on the progress of CASIS’s management of the ISS National Laboratory. GAO assessed the extent to which (1) CASIS has implemented the required management activities, and (2) NASA and CASIS measure and assess CASIS’s performance. To perform this work, GAO reviewed the cooperative agreement between NASA and CASIS, CASIS’s annual program plans, and other documentation and interviewed ISS, CASIS, and NASA officials.

What GAO Found

The Center for the Advancement of Science in Space (CASIS), manager of the International Space Station (ISS) National Laboratory, has taken steps to fulfill its management responsibilities contained in its cooperative agreement with the National Aeronautics and Space Administration (NASA), and has initiated the activities required by the NASA Authorization Act of 2010. GAO found that CASIS implemented procedures for prioritizing research; evaluated 206 proposals and awarded approximately $20 million in grants to 77 research projects through January 2015; and cultivated relationships with academic institutions, research-specific organizations, and other entities. CASIS, however, has not been able to fulfill its responsibility in the cooperative agreement to interact with the ISS National Laboratory Advisory Committee, which NASA was statutorily required to establish under the Federal Advisory Committee Act, because NASA has yet to staff the committee as required by the NASA Authorization Act of 2008. As a result, CASIS is not able to fulfill its responsibility in the cooperative agreement that requires it to coordinate with this committee and review any report or recommendations it originates.

CASIS has established fiscal year 2015 metrics that meet most of GAO’s key attributes for successful performance measures (see figure below); however, NASA and CASIS did not establish measurable targets for these performance metrics, and NASA’s annual assessment of CASIS was not documented.

| Assessment of Center for the Advancement of Science in Space (CASIS) Fiscal Year 2015 Metrics Against GAO’s Key Attributes of Successful Performance Measures |
|---|---|---|---|---|---|---|
| Metric | Linkage | Clarity | Measurable target | Objectivity | Core program activity | Limited overlap | Balance |
| CASIS Performance Metrics | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Source: GAO analysis; GAO-15-397

What GAO Recommends

GAO recommends NASA fully staff the ISS National Laboratory Advisory Committee; NASA and CASIS work together to develop measurable targets for CASIS’s metrics; and NASA begin documenting its annual review of CASIS’s performance. NASA partially concurred and CASIS did not concur with the first recommendation, but concurred with the other two. GAO continues to believe the first recommendation is valid, as discussed further in the report.

View GAO-15-397. For more information, contact Marie A. Mak at (202) 512-4841 or makm@gao.gov.