

Subcommittee on Oversight  
House Committee on Science, Space, and Technology  
U.S. House of Representatives

Questions for the Record

“Top Challenges for Science Agencies: Reports from the Inspectors General- Part 1”

Thursday, February 28, 2013  
10:00 a.m.

Room 2318 Rayburn House Office Building

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Questions submitted by Dr. Paul Broun, Chairman

**Information and Cyber Security**

- 1) **At a hearing before this Committee last February, NASA's Chief Information Officer said that the agency would be able to implement all 18 of the NASA IG's recommendations related to information security by June 2013. Since that hearing, NASA once again experienced a high-profile IT security breach when an employee lost an unencrypted laptop that they took out of a NASA facility. Given the ongoing issues associated with NASA IT Security, is NASA on track to comply with your office's recommendations?**

Answer: No. The 18 recommendations noted by the NASA Chief Information Officer (CIO) in her February 2012 testimony were made in 7 IG reports issued over the past 5 years. Unfortunately, NASA has made limited progress on these recommendations, implementing only 4 in the past year. The four recommendations NASA has implemented are:

- one recommendation for improving controls over the process of incident detection, response, and reporting;
- one recommendation for establishing controls for effective vulnerability scanning and configuration management; and
- two recommendations for improving continuous monitoring practices.

The remaining 14 recommendations remain open and relate to the following issues:

- incident detection, response, and reporting;
- risk management;

- asset management;
- vulnerability scanning and configuration management; and
- continuous monitoring.

NASA had planned to implement these recommendations by June 2013; however, it has delayed implementation until September 2013.

**2) During a hearing this Committee held last year on Information Technology (IT) and cyber security issues at NASA, the Chief Information Officer (CIO) identified poor execution of security practices as one of the greatest threats facing NASA information security. What has been done in the last year to remedy this situation?**

Answer: According to the NASA Office of the Chief Information Officer (OCIO), within the past year NASA has developed an action plan to remedy weaknesses in its IT security program. This plan includes:

- Implementing a risk-based approach to cyber security to better align and demonstrate the business and mission enhancement gained by implementing effective IT security practices and leveraging IT security solutions across the Agency;
- Improving visibility into Agency mission networks and systems (including JPL) and practices for building and operating secure web applications;
- Ensuring that NASA mission IT personnel integrate security into the system development life cycle as well as their day-to-day operations for mission IT capabilities;
- Expanding collaboration within and external to NASA to continuously develop and incorporate innovative security solutions effectively ensuring that the set of risks associated with the cost, schedule, and technical performance criteria includes information security as a principal ingredient for mission success; and
- Increasing collaboration efforts between CIO and Mission Directorates in support of IT-related initiatives.

However, the OIG is pessimistic about the success of these initiatives because the OCIO plan does not address the decentralization of authority and related cultural issues raised in the CIO's testimony. We have an ongoing review examining whether NASA's IT governance structure appropriately aligns authority and responsibility in support of the Agency's overall mission. Specifically, we are reviewing whether NASA's OCIO has the organizational, budgetary, and regulatory framework needed to effectively meet the Agency's varied missions, including IT security. We expect to issue this report in May 2013.

## **Space Act Agreements (SAA)**

- 3) What are the pros and cons of using SAAs to form NASA's public-private partnerships in order to address facilities maintenance backlogs?**

Answer: In February 2013, we initiated an audit of NASA's management of Space Act Agreements that will examine (1) NASA's processes for identifying costs, billing, and collecting payment on reimbursable agreements, (2) NASA's ability to evaluate and track benefits to ensure receipt of fair and reasonable return, and (3) NASA's adherence to export control laws when entering into such agreements. Once this review is completed, we will be in better position to assess the pros and cons of Space Act Agreements with regards to helping address the backlog of NASA facilities maintenance projects.

- 4) What is your opinion of the use of SAAs instead of Federal Acquisition Regulation (FAR) based contracts in connection with commercial crew vehicles? Understanding that NASA has moved some SAAs to FAR-based contractors, has NASA adequately addressed the concerns voiced by Congress and the Aerospace Safety Advisory Panel about the Agency's continued reliance on SAAs?**

Answer: We currently have ongoing reviews of the commercial crew program and, as discussed above, of NASA's management of its Space Act Agreements. While Space Act Agreements should not be used in lieu of a FAR-based contract for acquisition of a spaceflight system, NASA is not actually acquiring these systems but rather is using its Space Act authority to partner with private companies to help develop a commercial space industry for cargo and crew transportation to the International Space Station (ISS). In its commercial cargo program, NASA has transitioned from Space Act Agreements to fixed-price FAR-based contracts with two companies – Space Exploration Technologies (SpaceX) and Orbital Sciences Corporation – for 20 resupply missions to the ISS.

In the commercial crew program, NASA intended to transition last August to a FAR-based contract for the integrated design phase but changed course and continued to use Space Act agreements citing an expected \$1 billion shortfall in funding requirements by 2014. Similar to our forthcoming review of NASA's commercial cargo program, the OIG has an on-going review of the Agency's commercial crew program which we expect to complete by early summer.

## **Small Business Innovation Research (SBIR)**

- 5) What overarching safeguards would you recommend that NASA implement in its Small Business Innovation Research program to prevent fraud, waste, and abuse?**

Answer: Our audit work has resulted in several recommendations designed to improve NASA's internal controls in its SBIR program. Two audit reports ([Review of NASA's Management of Its Small Business Innovation Research Program](#) (IG-11-010-R) and [NASA's Management of Small Business Innovation Research and Small Business](#)

[Technology Transfer Contracts Funded by the Recovery Act](#) (IG-12-009-R)) made a total of 15 such recommendations. To date, NASA has implemented 12 of those recommendations.

One of the open recommendations called for implementation of virtual site visits to contractor facilities. Virtual site visits use Internet-based meeting software with visual and voice telecommunication. The visits would enable NASA officials to view contractors' research facilities, compare actual contractor personnel to proposed personnel, assess contractor progress, and ensure that contractors are complying with requirements without incurring the cost and time associated with traveling to the contractors' physical locations. Our investigations of SBIR allegations have disclosed several instances where the contractor, despite representations to the contrary, did not have the facilities, equipment, or qualified staff needed to successfully perform the SBIR contract. The number and geographic dispersion of SBIR recipients makes it preferable but fiscally challenging to physically visit contractor locations to confirm that the facility and personnel purported to be working on the award actually have the capability to perform the work. This virtual visit was implemented on Recovery Act Phase II awards and NASA has taken steps to implement the virtual visit on all SBIR Phase II awards.

### **CASIS**

- 6) In August 2011, NASA entered into a cooperative agreement with the Center for the Advancement of Science in Space (CASIS), a non-profit organization that was to manage the non-NASA science activities on the International Space Station (ISS). However, as identified in your office's 2012 Management Challenges report, "during its first year of operation CASIS encountered a variety of start-up challenges, including the resignation of its executive director, and as of October 2012, did not have a permanent Board of Directors." To what extent has your office examined CASIS and do you have any ongoing work regarding ISS utilization?**

Answer: We currently are completing a review examining NASA's efforts to utilize the U.S. Laboratory portion of the ISS. The review objectives include: 1) current usage of the ISS; 2) CASIS' efforts to facilitate non-exploration research onboard the ISS; and 3) transportation challenges that could hinder effective utilization of the ISS. Specific to CASIS, we are examining the organization's achievements to date, metrics used to measure that progress, and challenges related to attracting financial donors and users to conduct examinations onboard the ISS. We expect to issue the final report this summer.

### **NASA Infrastructure**

- 7) During the hearing, you testified about the waste associated with NASA's aging infrastructure, which require about \$2.3 billion in upkeep and maintenance costs. You also referenced an audit from earlier this month in which you identified 33 underutilized facilities with no future mission needs that cost NASA more than \$43 million to maintain in FY 2011.**

**a. In addition to identifying the problem, what recommendations have you made to NASA to reduce or eliminate this source of expense?**

**b. What is the agency's response?**

Answer: Our report found that NASA has ongoing efforts to evaluate Center capabilities against the current and future missions of the Agency. We recommended that NASA's Associate Administrator complete the Agency's ongoing comprehensive technical capabilities assessment; ensure that the assessment includes a process for communicating decisions to outside stakeholders; and is established into Agency policy. Such assessments should be conducted on a regular basis and sustained over time. We also recommended that NASA's Associate Administrator for Mission Support expedite implementation of Corporate Portfolio Management (CPM) and develop processes to improve data accuracy with the NASA Technical Capabilities Database (NTCD). NASA concurred with our recommendations.

In addition, NASA has a series of initiatives underway that we see as positive steps towards "rightsizing" its real property footprint. For example, the development of an Agency Facilities Strategy and Integrated Master Plan, capability assessments, and organizational changes to centralize decision authority over infrastructure matters should better position the Agency to strategically assess infrastructure needs, manage underutilized property, and divest itself of facilities that are duplicative or unneeded. However, many of these efforts are in the early stages and their ultimate effect on the Agency's ability to reduce its real property portfolio remains unclear.

Despite these efforts, our report noted that these efforts ultimately may be insufficient to overcome longstanding cultural and political obstacles to eliminating or consolidating Agency facilities and that an outside process similar to the Department of Defense's Base Realignment and Closure Commission may be necessary.

**ITAR Records Request**

- 8) During the hearing, I asked you to provide the Committee with all records relating to your office's review of allegations related to ITAR (International Traffic in Arms Regulations) violations at the Ames Research Center. Please reference p. 32 of the hearing transcript for more information about this request, and please ensure you provide the information requested as part of your reply to these questions.**

Answer: Answer: We are conducting an administrative investigation of these allegations and therefore it would not be appropriate to share information about these matters at this time. We would be pleased to brief your staff on the timing of this review as it progresses.

Questions submitted by Rep. Bill Posey

- 1) **Mr. Martin, in August of 2012 the NASA IG office issued a report regarding NASA's leasing practices.**

**It was found that "NASA did not have clear guidance to ensure that property identified for leasing was not in excess to the agency's needs" (pp.iii-iv of the Report).**

**Can you point to successful leasing practices in other agencies that can serve as a model for NASA? Can you offer specific recommendations on how NASA can improve its leasing practices?**

Answer: Our August 2012 report assessed whether NASA effectively: (1) identified space available for lease to other entities, (2) marketed available space to potential Federal and non-Federal tenants, (3) established internal controls to ensure that lease agreements provide the best value to the Government and are fair to potential tenants, and (4) accounted for in-kind consideration received from Enhanced Use Leases (EUL). That report found that although NASA has made improvements to its leasing program in recent years, the Agency still faces significant challenges to ensure that it has effective controls in place to maximize the benefits of its leasing program. As such, we made the following three recommendations aimed at improving NASA leasing practices.

- 1) Revise existing policy and develop new policy. Specifically:

- articulate the criteria Centers should use to determine whether underutilized property has a current or future mission use;
- require that Federal entities be considered for leasing opportunities and that NASA coordinate with the GSA Office of Client Solutions to identify potential Federal tenants;
- require that leasing opportunities be widely publicized;
- provide guidance for Center management addressing the requirements for lease agreements; and
- provide guidance for determining whether in-kind consideration provides the best value to the Government.

- 2) Implement a process for identifying and maintaining a complete inventory of real property available for leasing.

- 3) Institute a review of all existing agreements to ensure they are consistent with applicable statutes and regulations regarding signature authority and other required terms.

We did not benchmark the leasing practices of other agencies as part of our review.