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AUDIT REPORT

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# NASA'S CONSTELLATION STANDING REVIEW BOARDS ESTABLISHED WITHOUT DUE REGARD FOR MEMBER INDEPENDENCE REQUIREMENTS

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OFFICE OF INSPECTOR GENERAL

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National Aeronautics and  
Space Administration

Final report released by:

signed  
Evelyn R. Klemstine  
Assistant Inspector General for Auditing

## Acronyms

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CSSS	Constellation Space Suit Systems
CxP	Constellation Program
EVA	Extravehicular Activity
FACA	Federal Advisory Committee Act
GAO	Government Accountability Office
IPAO	Independent Program Assessment Office
NPD	NASA Policy Directive
NPR	NASA Procedural Requirements
OGC	Office of General Counsel
OIG	Office of Inspector General
SAIC	Science Applications International Corporation
SRB	Standing Review Board

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## OVERVIEW

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# NASA'S CONSTELLATION STANDING REVIEW BOARDS ESTABLISHED WITHOUT DUE REGARD FOR MEMBER INDEPENDENCE REQUIREMENTS

## The Issue

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NASA established Standing Review Boards (SRBs) to ensure certain Agency projects are reviewed by groups of uniquely qualified experts who can provide, essentially, quality control reviews throughout the project's life cycles.<sup>1</sup> Agency directives require that SRB members be independent of the program or project they review (i.e., unbiased and outside the advocacy chain of the program or project) to ensure that the SRB can provide an impartial, unbiased opinion of the program or project's potential success. This report addresses the SRBs for the Constellation Program (CxP) and the CxP projects. Our objective was to determine the independence of the members of those SRBs.

This report follows up on and expands the scope of our April 2008 report concerning independence and conflict-of-interest issues involving the SRB for CxP's Orion Project.<sup>2</sup> In that report, we state that NASA did not establish the Orion SRB in accordance with Federal law or NASA guidance. The Orion SRB met the Federal Advisory Committee Act<sup>3</sup> (FACA) definition of an advisory committee. Although advisory committees meeting this definition must be established in accordance with FACA and NASA Policy Directive (NPD) 1150.11, "Federal Advisory Committee Act Committees," September 22, 2004, the Orion SRB was not. Had NASA initially recognized the Orion SRB as an advisory committee subject to FACA, NASA's ethics process associated with advisory committee participation would have been triggered, resulting in a focus on board member independence and conflict of interest resolution. We found that 6 of the Orion SRB's 19 members were not fully independent of the Orion Project, as required by NASA Procedural Requirements (NPR) 7120.5D, "NASA Space Flight Program and Project Management Requirements," March 6, 2007. All 6 were employees of companies having contracts for Orion work and 4 of the 6 were also stockholders. In addition to the Orion SRB, NASA initiated SRBs for the Constellation Program itself and CxP's other projects:

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<sup>1</sup> NASA's program and project "life cycles" includes independent review milestones such as the System Requirements Review, System Definition Review, Preliminary Design Review, and Critical Design Review.

<sup>2</sup> NASA Office of Inspector General, "Final Memorandum on the Standing Review Board for the Orion Crew Exploration Vehicle Project" (Report No. IG-08-018, April 28, 2008).

<sup>3</sup> Title 5, United States Code (5 U.S.C.), Sections 1-16, the Federal Advisory Committee Act (1972), as amended.

Ares Project, Extravehicular Activity (EVA) Systems Project, Ground Operations Project, and Mission Operations Project. Details of the review’s scope and methodology are in Appendix A.

## Results

We found 21 SRB members—close to one-third of all non-Federal CxP SRB members—with conflicts of interest and determined that each of the SRBs for CxP and its constituent Projects included at least one non-Federal Government employee who was conflicted. Specifically, each SRB included at least one non-Federal Government employee who was an employee or consultant of a NASA contractor with an interest in or contract with either CxP or one of its projects. For example, the 12 non-Federal members of the CxP SRB included 4 members (33 percent) who were not independent. Table 1 below summarizes the extent of conflict-of-interest issues found amongst non-Federal Government employees of the CxP SRB and CxP project SRBs.

<b>Table 1. Composition of Constellation Program Standing Review Boards (SRBs) Non-Federal Government Employees (as of October 1, 2008)</b>			
<b>SRB</b>	<b>Number of Non-Federal Government Employees</b>	<b>Members with Conflicts</b>	
		<b>Total</b>	<b>Percentage of Non-Federal Government Employees</b>
CxP	12	4	33
Ares	10	2	20
EVA Systems	8	2	25
Ground Operations	13	6	46
Mission Operations	8	1	13
Orion <sup>a</sup>	15	6	40

<sup>a</sup> As reported in NASA OIG Report No. IG-08-018 (April 28, 2008).

This condition occurred because NASA’s procedures for determining the independence of an SRB member were inadequate. Specifically, because the SRBs met the definition of FACA committees but were not organized under FACA, they did not trigger the ethics review process associated with the establishment of FACA committees. Instead, NASA used a process that was lacking in both rigor and accuracy for determining independence of SRB members. For example, we identified seven SRB members who failed to indicate

on their self-assessment forms that they were employed by companies receiving funding from CxP or CxP projects.

Because SRB members were not independent, NASA lacked assurance that SRB members provided impartial and unbiased opinions on the project's success in meeting technical, schedule, and cost-related milestones. Furthermore, by not verifying an SRB member's independence, NASA placed the SRB member at risk of violating the Procurement Integrity Act because the Agency did not take precautions, as required by the Act, to ensure that certain persons do not have access to source selection information that the Agency had not previously made available to the public.

## Management Action

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In November 2008, NASA took actions to address our concerns with FACA and the conflict-of-interest issues. Specifically, NASA initiated the Constellation Program and Project SRB Alignment and Continuous Improvement Activity with the objective of ensuring all SRBs maintain the highest level of technical expertise, currency, and independence. Between November 2008 and February 2009, the Agency will "pause" most CxP SRB activities while it addresses the FACA and conflict of interest compliance issues we disclosed in our April 2008 report. NASA plans to adopt an annual SRB review process that includes a disclosure document similar to the confidential financial disclosure report that Federal employees must file annually. In addition, the Agency plans to conduct a review for best practices and improvements to include transitioning the SRBs to be FACA compliant. We will continue to monitor these activities to assure consistency of management action with Federal law and NASA policy.

In our January 16, 2009, draft of this report, we recommended that prior to reactivating the CxP SRBs, the Associate Administrator for Program Analysis and Evaluation implement adequate procedures to ensure identification of SRB members who have conflicts of interest and that NASA's Chief Engineer include or reference the implemented procedures in an applicable Agency requirements document.

The Associate Administrator for Program Analysis and Evaluation concurred with our recommendation to implement procedures to ensure identification of SRB members who have conflicts of interest and stated that he incorporated such procedures into Program Analysis and Evaluation guidance to be released by March 31, 2009. NASA's Chief Engineer concurred with our recommendation to include or reference implemented procedures in an applicable Agency requirements document and will update NPR 7120.5D to reference the Program Analysis and Evaluation guidance. Management's comments are responsive; however, both recommendations will remain open until we have verified that the SRBs were reestablished in a manner consistent with Federal law and revised agency guidance. (See Appendix D for the full text of management's comments.)



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## Background

The Constellation Program (CxP) is responsible for designing and developing the next generation of NASA space vehicles that will return human explorers to the moon and carry them onward to Mars. CxP is a tightly-coupled program with multiple projects and each executes portions of CxP's mission. CxP consists of six major projects—the Orion Crew Exploration Vehicle (Orion), Crew and Cargo Launch Vehicles (Ares I and Ares V), Ground Operations, Mission Operations, Extravehicular Activity (EVA) Systems, and Lunar Lander (Altair)—all of which are managed independently but are interdependent because no single project is capable of implementing the complete mission. For example, Ground Operations will provide the infrastructure for the Orion vehicle to launch on Ares I supported by Mission Operations, and the EVA Systems will develop elements (i.e., spacesuits) to protect the Orion crewmembers.

**Standing Review Boards (SRBs).** NASA established SRBs for CxP and each of its six projects to conduct a series of independent reviews throughout the program's and projects' life cycles. The reviews include assessments on the adequacy and credibility of the program or project's technical and management approaches, schedules, resources, costs, and risks; compliance with Agency management and systems engineering guidance; and readiness to proceed to the next life-cycle phase. NASA's Independent Program Assessment Office (IPAO), part of the Office of Program Analysis and Evaluation, prepares the SRB nomination packages, which are then approved by the program or project's convening authority.<sup>4</sup> The number of SRB members differs based on a project's complexity, but each SRB has a single chairperson and a NASA Review Manager, who assists the chairperson in interfacing with the NASA program and project managers. Although IPAO can augment a particular SRB with specialized reviewers when needed, the concept is to have the same core membership for the duration of the project. Even though the SRBs are advisory and do not have authority over any program or project content, NASA management must consider the SRB's input when deciding whether the program or project should proceed to the next phase of development.

**SRB Guidance.** NASA Procedural Requirements (NPR) 7120.5D, "NASA Space Flight Program and Project Management Requirements," March 6, 2007, which provides guidance for establishing SRBs, was revised in response to multiple Government Accountability Office (GAO) reports that recommended NASA change its approach to

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<sup>4</sup> Convening authorities vary with the significance of the program or project under review. For the CxP and associated projects, the convening authority included the NASA Associate Administrator; the NASA Chief Engineer; the Associate Administrator for Exploration Systems; the Associate Administrator for Program Analysis and Evaluation; and the Director of the responsible center.

program and project management, specifically as it related to the acquisition process.<sup>5</sup> NPR 7120.5D notes that board members are chosen based on their management, technical, safety and mission assurance expertise, their objectivity, and their ability to make a broad assessment of a program/project that employs numerous engineering and other disciplines. SRB reviews assessing, for example, program/project technical and management approaches, resources, and related costs would bring industry expertise to bear on project-specific investment decisions. NPR 7120.5D requires that SRB members be independent of the program or project under review; that is, none of the members should have a stake in the outcome of any of the life-cycle reviews or in the program or project itself. The NPR requires independence to ensure that the SRB can provide an impartial, unbiased opinion of the program or project's success. The CxP and its associated projects were NASA's first space flight program and projects to implement the new guidance.

In addition to NPR 7120.5D, IPAO developed the draft "SRB Handbook,<sup>6</sup> Version 1.0," August 1, 2007, to supplement that guidance. The Handbook contains guidelines for SRBs such as organizational structure, roles and responsibilities, processes the SRB must implement, and products it must produce to support the Agency's implementation of its integrated independent life-cycle review process.

**Office of Inspector General's (OIG) Previous Review of the Orion SRB.** In our "Final Memorandum on the Standing Review Board for the Orion Crew Exploration Vehicle Project" (Report No. IG-08-018, April 28, 2008), we showed that the Orion SRB's purpose, responsibilities, and membership met the definition and characteristics of a committee that should be established under the Federal Advisory Committee Act (FACA). FACA generally applies to committees that (1) are established by a Federal official, (2) include at least one non-Federal Government employee, and (3) are responsible for providing advice and recommendations to the agency. Because the Orion SRB established by NASA included 15 non-Federal Government employees, and its primary responsibility was to provide NASA management an advisory opinion of the Orion Project's success in meeting technical, schedule, and cost-related milestones, we conducted further analysis of FACA and FACA-related case law to consider FACA's applicability to the Orion SRB. Based on that analysis, we believe that FACA did apply to the Orion SRB; therefore, the SRB should have been established and operated in accordance with FACA. NASA Policy Directive (NPD) 1150.11, "Federal Advisory Committee Act Committees," September 22, 2004, requires that NASA employees coordinate with the Office of the General Counsel (OGC) when committees or teams involving non-NASA personnel are established to ensure that the Agency complies with

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<sup>5</sup> For example, GAO's report, "NASA-Implementing a Knowledge-Based Acquisition Framework Could Lead to Better Investment Decisions and Project Outcomes" (GAO-06-218, December 21, 2005), stated that NASA's acquisition framework did not provide the information needed to make major investment decisions, which contributed to NASA's difficulties in meeting cost, schedule, and performance objectives for its programs and projects.

<sup>6</sup> The draft SRB Handbook, undergoing Agency review, will be released once the review is completed.

FACA if it is applicable. There was no coordination with the OGC when the Orion SRB was established.

Although advisory committees meeting the definition and having the characteristics outlined by FACA must be established in accordance with FACA and NPD 1150.11, the Orion SRB was not. Had NASA initially recognized the Orion SRB as an advisory committee subject to FACA, NASA's ethics process associated with advisory committee participation would have been triggered, resulting in a focus on board member independence and conflict of interest resolution. Furthermore, we found that six of the Orion SRB members, including the Chair, were not independent of the Orion Project, as required by NPR 7120.5D. Those six Orion SRB members were employees (and in four cases were also stockholders) of companies having contracts for Orion work. Because of their employee/stockholder status, those members had a vested interest in Project assessments concerning the adequacy and credibility of technical and management approaches, schedules, resources, costs, and risks; compliance with Agency management and systems engineering guidance; and readiness to proceed to the next life-cycle phase. Thus, they were unsuited to serve on an advisory board that emphasizes "objectivity and independence." We determined that their employee/stockholder status created an organizational conflict of interest between the members' employers and NASA.

We recommended that the Associate Administrator for Program Analysis and Evaluation, in coordination with the OGC and the Office of the Chief Engineer, suspend the involvement of the six Orion SRB members found to be not independent of the Project from further SRB activities until an evaluation of the legality and propriety of the participation of these individuals in the SRB was concluded. That evaluation should include an analysis of whether the Orion SRB should be reorganized under FACA and whether the ethical rules for special Government employees are implicated. To ensure that the lessons learned from the issues associated with the establishment of the Orion SRB are incorporated into NASA practice more generally, we also recommended that the Agency evaluate the purpose, roles, responsibilities, and membership of SRBs to determine the optimum approach for accomplishing the SRB mission while ensuring compliance with all applicable Federal laws and NASA guidance. We further recommended that, based on the evaluation results, the Agency should revise NPR 7120.5D and NASA's draft SRB Handbook to reflect any revised SRB roles, responsibilities, and membership requirements.

In our April 2008 final report, we found the Agency's response to our recommendations to be nonresponsive. However, subsequent management action resulted in the issuance of our February 9, 2009, "Addendum to Final Memorandum on the Standing Review Board for the Orion Crew Exploration Vehicle Project," which summarized management's actions that were responsive to the intent of the recommendations. The recommendations are resolved, but remain open pending completion and verification of the corrective actions.

## Objective

The objective of this review was to determine the independence of the members of the remaining SRBs for CxP and CxP projects.<sup>7</sup> We also reviewed internal controls as they related to the objective. See Appendix A for details of the review's scope and methodology, our review of internal controls, and a list of prior coverage.

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<sup>7</sup> We did not review the Altair SRB because it was temporary—established in June 2008, using members of other SRBs, to conduct the Mission Concept Review and disbanded in October 2008 upon completion of that review.

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## STANDING REVIEW BOARD MEMBERS WERE NOT INDEPENDENT OF THE CONSTELLATION PROGRAM

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Each CxP SRB included non-Federal Government employees who were employees or consultants of NASA contractors that had an interest in or a contract with either CxP or one of its projects. For example, the 12 non-Federal members of the CxP SRB included 4 members (33 percent) who were not independent of CxP or its Projects. This condition occurred because NASA did not have adequate procedures to determine if the members were independent. Specifically, because the SRBs were not organized under FACA, it did not trigger the ethics review process. As a result of this condition, NASA lacked assurance that SRB members provided impartial and unbiased opinions on the project's success in meeting technical, schedule, and cost-related milestones because SRB members had a vested interest in project assessment outcomes. Furthermore, by not verifying an SRB member's independence, NASA places the SRB member at risk of violating the Procurement Integrity Act because the Agency did not take precautions, as required by the Act, to ensure that access to source selection information, which the Agency had not previously made available to the public, is limited to only the appropriate personnel.

### **FACA Applicability**

**FACA.** FACA was enacted in 1972 to formalize the process for establishing, operating, and terminating advisory committees that are formed to provide expert advice to Executive Branch agencies concerning Federal policies and programs. The membership of these advisory committees includes non-Federal Government employees, which provides a unique opportunity for the public to participate actively in the Federal Government's decision-making process.

To ensure that FACA applicability is appropriately considered for NASA committees, NPD 1150.11 requires NASA personnel to coordinate with the OGC prior to establishing committees that will include non-NASA personnel. Once the OGC renders the opinion that FACA is applicable, the advisory committee must operate in a manner fully consistent with the provisions of the Act.

**Applicability of FACA to the CxP SRBs.** Because each of the CxP SRBs were established and managed like the Orion SRB, they also meet the definition of a FACA committee. FACA generally applies to committees that (1) are established by a Federal official, (2) include at least one non-Federal Government employee, and (3) are responsible for providing advice and recommendations to the agency. This places each of the CxP SRBs in violation of FACA.

**Office of General Counsel Coordination.** The CxP SRBs were not identified as an advisory committee subject to FACA because IPAO convened the SRBs without first coordinating with the OGC as required by NPD 1150.11. NPD 1150.11 states that “all employees are responsible for coordinating with the Office of the General Counsel regarding the establishment of committees or teams involving non-NASA personnel.” At a minimum, the IPAO Director should have discussed the issue with the OGC, which would have provided the OGC an opportunity to render a decision concerning FACA’s applicability to the CxP SRBs.

## Independence Requirements

In addition to the NPR 7120.5D requirement that SRB members be independent of the project under review, IPAO required each of the candidate SRB members to complete the “Personal, External, and Organizational Independence, and Political Influence Self-Assessment,” September 28, 2005 (see Appendix B), to identify potential independence impairments or conflict-of-interest situations. In the self-assessment, each candidate provided yes or no answers to questions in seven categories, including financial interests, undue influence, and employment. A yes answer would indicate a potential impairment to independence and required the candidate to provide additional information. For example, a question from the “Current or Former Employee” section asked, “Have you ever directly worked for the program or project being reviewed or been an employee of a contractor that receives funding from the program or project being reviewed?” If the candidate answered yes, he or she then had to provide details of that employment, to be used in conjunction with the self-assessment to determine the candidate’s fitness for SRB participation.

**OIG Determination of Compliance with Independence Requirements.** We reviewed the self-assessments and biographies submitted by each non-Federal SRB member. We focused our review on the non-Federal members because they were not subject to the more robust financial disclosure and criminal conflict-of-interest provisions of Title 18, United States Code, Section 208, which applies to Federal employees and “Special Government Employees.”<sup>8</sup> From our review, we identified all the companies employing SRB members as either an employee or a consultant. We then researched NASA procurement records and company Web sites to ascertain whether the companies performed work as either a prime contractor or subcontractor for CxP or its constituent

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<sup>8</sup> We note that had the Agency used the required FACA process, all of these persons could have been deemed Special Government Employees and subject to the conflict of interest provisions of Title 18.

projects. Because each CxP project is dependent on the successful outcome of the other projects, we considered it a conflict of interest if an SRB member was an employee or consultant of any CxP contractor.

## Conflicts of Interest

Based on our review, we determined that each SRB contained at least one non-Federal Government employee who was not independent of CxP or its projects. We calculated the percentage of members with conflicts compared to the total number of members as well as the number of non-Federal members. Table 2 below summarizes the extent of conflict-of-interest issues found in the CxP SRB and CxP project SRBs.

<b>Table 2. Composition of Constellation Program Standing Review Boards (SRBs) (as of October 1, 2008)</b>					
<b>SRB</b>	<b>Number of Members</b>		<b>Members with Conflicts</b>		
	<b>Total</b>	<b>Non-Federal Government Employees</b>	<b>Total</b>	<b>Percentage of Total</b>	<b>Percentage of Non-Federal Government Employees</b>
CxP	16	12	4	25	33
Ares	16	10	2	13	20
EVA Systems	11	8	2	18	25
Ground Operations	17	13	6	35	46
Mission Operations	11	8	1	9	13
Orion <sup>a</sup>	19	15	6	32	40

<sup>a</sup> As reported in NASA OIG Report No. IG-08-018 (April 28, 2008).

**CxP SRB.** NASA established an independent review team in the early summer of 2006 to conduct a Preliminary Non-Advocate Review of CxP at the conclusion of the Constellation constituent project System Requirements Reviews. These reviews were scheduled to be completed in early 2007, and the independent review team was expected to report to the Agency Program Management Council in June 2007.

However, in August 2006, NASA was drafting an update to NPR 7120.5D (released on March 6, 2007) to implement significant changes in the scope and conduct of independent review teams. In fact, independent review teams were being replaced with SRBs, which would conduct multiple life-cycle reviews beginning with an assessment at the System Requirements Review. Since the CxP independent review team was already

in place, NASA management allowed the team to complete its CxP System Requirements Review and provide an informal outbrief and report to the CxP Manager. On December 5, 2006, in anticipation of the updated guidance, NASA management disbanded the independent review team following submission of their preliminary observations report to the CxP Manager.

In May 2007, NASA established the CxP SRB in accordance with the updated NPR. The CxP SRB comprised 16 members, of whom 12 were non-Federal Government employees. The CxP SRB participated in the June 2008 Systems Definition Review. The next technical review the CxP SRB is scheduled to participate in is the Preliminary Design Review scheduled for July 2009.

Of the 16 members, we determined that 4 members (25 percent of the total board and 33 percent of the non-Federal membership) were not independent of the CxP or its projects. Specifically, we found the following:

- One member was an employee of the ARES Corporation, which provides program planning and control support to CxP as a subcontractor on NASA's Constellation Program Support Contract awarded to Stinger Ghaffarian Technologies on February 28, 2008.
- One member was an employee of Lee & Associates, which provides engineering and technical services to the Ares Project under a blanket purchase agreement.
- Two members were employees of Science Applications International Corporation (SAIC), which supports CxP and the Orion Project with program planning and control services under the Agency's Constellation/Crew Exploration Vehicle Engineering Service Contract and with safety and mission assurance services under a Johnson Space Center contract.

**Ares SRB.** The Ares SRB was established in May 2007 to conduct the reviews for the Constellation launch vehicle Ares I project. The launch vehicle delivers crew to Earth orbit as well as trans-lunar trajectories. The Ares SRB comprised 16 members, 10 of whom were non-Federal Government employees. The Ares SRB participated in the October 2007 Systems Definition Review and the September 2008 Preliminary Design Review. The next technical review the Ares SRB is scheduled to participate in is the Critical Design Review scheduled for March 2011.

Of the 16 members of the Ares SRB, we determined that 2 members (13 percent of the total board and 20 percent of the non-Federal membership) were not independent of the Ares Project or CxP. Specifically, we found the following:

- One member was an employee of Quality Assurance & Risk Management Services, a subcontractor to Honeywell Technology Solutions, Inc. (Honeywell) (a business segment under Honeywell Aerospace, which is a business segment

under Honeywell International, Inc.). Quality Assurance & Risk Management Services provides safety-related services to the Ares Project under the Agency's NASA Contract Assurance Service Contract.

- One member was an employee of SAIC, identified above in relation to the CxP SRB.

**EVA Systems SRB.** The EVA Systems SRB was established in March 2007 to provide an independent assessment of the EVA Systems Project's technical and programmatic approach, risk posture, and readiness to proceed to the next life-cycle phase. The EVA Systems includes the elements (pressure suits, EVA life-support systems, EVA tools, and mobility aids) necessary to protect crewmembers and allow them to work effectively during all mission phases in environments that cannot sustain human existence. The EVA Systems SRB membership comprised 11 members, 8 of whom were non-Federal Government employees. The EVA Systems SRB participated in the April 2007 System Requirements Review and the May 2008 Systems Definition Review. The next technical reviews the EVA Systems SRB is scheduled to participate in are the Preliminary Design Review scheduled for September 2009 and the Non-Advocate Review scheduled for November 2009.

Of the 11 members, we determined that 2 members (18 percent of the total board and 25 percent of the non-Federal membership) were not independent of the EVA Project or the Orion Project. (Not included here was a third conflicted SRB member, discussed on page 13, whose participation was terminated prior to the October 1, 2008, timeframe covered in this section.) Specifically, we found the following:

- One member was an employee of Honeywell, which is a subcontractor to Lockheed Martin on Johnson Space Center's Orion Crew Exploration Vehicle Contract and part of a contractor team competing for the Agency's Constellation Space Suit Systems (CSSS) contract and also subcontracts work to Quality Assurance & Risk Management Services identified above in relation to the Ares SRB.
- One member was an employee of Lockheed Martin, Inc., the prime contractor for the Orion Project's Crew Exploration Vehicle Contract.

**Ground Operations SRB.** The Ground Operations SRB was established in March 2007 to conduct the Ground Systems life-cycle reviews. Ground Systems provides the launch site ground processing, integrated testing, logistics services, and launch services for Orion and Ares, and post-landing, recovery and de-integration services for the Orion and the Ares solid rocket boosters. The Ground Operations SRB membership comprised 17 members, 13 of whom were non-Federal Government employees. The Ground Operations SRB participated in the May 2007 System Requirements Review and the May 2008 Systems Definition Review. The next technical reviews the Ground Operations

SRB is scheduled to participate in are the Preliminary Design Review scheduled for April 2009 and the Non-Advocate Review scheduled for July 2009.

Of the 17 members, we determined that 6 members (35 percent of the total board and 46 percent of the non-Federal membership) were not independent of the CxP or its projects. Specifically, we found the following:

- One member was an employee of Analex Corporation, which is the prime contractor on Kennedy Space Center's Launch Service Program Expendable Launch Vehicle Integrated Services Contract and provides technical analysis and document reviews for the Ground Operations Project.
- One member was an employee of ASRC Aerospace, which provides engineering, configuration management, and project management services to CxP and the Ground Operations Project under its University-affiliated Spaceport Technology Development Contract with Kennedy Space Center.
- One member was an employee of Honeywell, identified above in relation the Ares SRB and the EVA Systems SRB. Honeywell is a subcontractor to Lockheed Martin (also identified above in relation to the EVA Systems SRB) on the Orion Crew Exploration Vehicle Contract and a member of a contractor team competing for the Agency's CSSS.
- Two members were employees of Lee & Associates, identified above in relation to the CxP SRB.
- One member was an employee of Tecolote Research, Inc., which provides cost estimating support to CxP.

**Mission Operations SRB.** The Mission Operations SRB was established in February 2007 to conduct the Mission Systems' life-cycle reviews. Mission Systems includes the Mission Control Center in Houston and its interfaces with the flight systems for flight operations; crew and flight controller training facilities; mission planning and flight design tools; personnel for planning, training, and flight operations; and Mission Operations facilities development and maintenance. The Mission Operations SRB membership comprised 11 members, 8 of whom were non-Federal Government employees. The Mission Operations SRB participated in the March 2007 System Requirements Review and the March 2008 Systems Definition Review. The next technical reviews the Mission Operations SRB is scheduled to participate in are the Preliminary Design Review scheduled for February 2010 and the Non-Advocate Review in May 2010.

Of the 11 members of the Mission Operations SRB, we determined that 1 member (9 percent of the total board and 13 percent of the non-Federal membership) was not

independent of the Ares Project and CxP. Specifically, we found that one member was an employee of SAIC, identified above in relation to the CxP SRB and Ares SRB.

## **Inadequate Procedures**

The CxP SRB and every CxP project SRB was not organized in accordance with FACA and included at least one non-Federal Government employee with a conflict of interest because NASA did not have adequate procedures to trigger an ethics review process for identifying conflicts of interest. NPR 7120.5D established the requirement that SRB members be independent but did not address what Agency officials should do to ensure independence. The IPAO's draft SRB Handbook discusses ethics and independence and states that SRB member nominations should undergo an independence check but does not identify or establish procedures and processes for verifying independence.

IPAO's "Personal, External, and Organizational Independence, and Political Influence Self-Assessment," September 28, 2005, further limited the independence evaluation because it does not require the same level of detailed information required for conflict-of-interest reviews of Federal employees or those serving on Federal advisory committees. For example, IPAO's self-assessment form requires SRB candidates to identify their employer, or their clients in the case of consultants, only if the employer or client receives funding from the program or project under review. By comparison, Federal employees are required to list all sources of salary and other earned income in excess of \$200 per year. When we compared the information disclosed on the self-assessment forms with the candidates' biographies, we identified seven SRB members whose employers either received funding or competed for CxP or CxP project work. We determined that one cause for IPAO's failure to identify these conflicts of interest was that the IPAO form did not require sufficiently detailed information.

In addition, IPAO's guidance does not require the OGC to review the self-assessment forms even though General Counsel is delegated the authority for coordinating and managing NASA's ethics program, which specifically addresses conflict-of-interest issues. IPAO relied solely on its self-assessment form in making determinations about the candidate's independence. As the General Counsel is the designated Agency ethics official for NASA, we believe that OGC staff could make a more informed determination about an SRB candidate's independence and, especially, if candidates are required to list all sources of income.

As evidenced by the results of our review, IPAO's process and procedures for determining an SRB member's independence and freedom from conflicts of interest were inadequate. As a result, NASA lacked assurance that SRB members provided impartial and unbiased opinions about CxP and the CxP projects' success in meeting technical, schedule, and cost-related milestones.

## Potential for Violation of the Procurement Integrity Act

NASA's lack of assurance that SRB members were independent could possibly have caused a violation of the Procurement Integrity Act,<sup>9</sup> which prohibits improper disclosure of confidential Government procurement information. Two EVA Systems SRB members, who were also employees of companies that "teamed" to bid on the CSSS contract, had access to source-selection information not available to the general public and not disclosed publicly.<sup>10</sup> NASA's inadequate process and procedures for determining an SRB member's independence and freedom from conflicts of interest resulted in NASA not taking the precautions required by the Procurement Integrity Act to prevent disclosure of confidential source selection information.

**Procurement Integrity Act.** The Procurement Integrity Act prohibits improper disclosure of confidential Government procurement information. Specifically, the Procurement Integrity Act prohibits a person from knowingly, other than as provided by law, obtaining source selection information before the award of the contract to which the information relates. The Act also prohibits a person who is advising or has advised the United States, with respect to a Federal agency procurement, from disclosing source selection information before the award of the contract. Source selection information is any "information prepared for use by a Federal agency for the purpose of evaluating a bid or proposal to enter into a Federal agency procurement contract, if that information has not been previously made available to the public or disclosed publicly." Disclosure of source selection information would jeopardize the integrity or successful completion of the procurement to which the information relates.

**Constellation Space Suit Systems Contract.** The CSSS contract is for the design, development, test, evaluation, and production of a space suit system to support astronauts while aboard the Orion Crew Exploration Vehicle and the Altair Lunar Lander and during human exploration of the surface of the moon. NASA issued a request for proposal for the CSSS contract on October 1, 2007, and accepted proposals through December 20, 2007. Two companies submitted proposals for the contract, Oceaneering International, Inc. (Oceaneering), and Exploration Systems and Technology, a joint venture between Hamilton Sundstrand Corporation and ILC Dover. On June 12, 2008, NASA awarded the CSSS contract to Oceaneering. Major subcontractors for Oceaneering included Cimarron Software Services, Inc. (Cimarron); Honeywell International, Inc.; United Space Alliance; David Clarke Company, Inc.; Air-Lock, Inc.;

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<sup>9</sup> Title 41, United States Code, Chapter 7, Section 423 (41 U.S.C. § 423), "Restrictions on Disclosing and Obtaining Contractor Bid or Proposal Information or Source Selection Information."

<sup>10</sup> The OIG Office of Audits referred the EVA SRB conflict-of-interest issue to the Office of Investigations on July 1, 2008 to determine if a violation of the Act occurred. The Office of Investigations could not confirm that the SRB member used the source selection information to influence the outcome of the procurement. In fact, in that instance, the SRB member recused himself after learning his company was interested in the EVA competition.

Harris Corporation; Paragon Space Development Corporation; e-Pro; Raven Aerospace Technology; Bastion Technologies; and Ecliptic Enterprises.

**EVA SRB Members Employed by CSSS Contractors.** We found that two of the EVA Systems SRB members worked for contractors that competed for the CSSS contract. One member was the President and Chief Operating Officer of Cimarron and the other was a quality procurement analyst for Honeywell Technology Solutions.

The President and Chief Operating Officer of Cimarron was an original member of the EVA Systems SRB when it was established in March 2007. He served as the board's expert on mission operations and participated in the EVA Project's System Requirements Review in April 2007. The Cimarron official recused himself from future EVA Systems SRB activity in July 2007, stating that his company was "negotiating a teaming agreement with one of the EVA suit competitors." IPAO preserved his membership by designating him as a non-participating member. After NASA awarded the CSSS contract to Oceaneering in June 2008, the EVA Systems SRB Review Manager formally terminated the Cimarron official's membership. Furthermore, unlike the other non-Federal Government employees of the EVA Systems SRB, the Cimarron official was not under contract for his work on the board and, as a result, did not sign an agreement stating that he would not disclose source selection information to any party not authorized by the CSSS contracting officer.

The Honeywell quality procurement analyst was also an original member of the EVA Systems SRB and served as the board's expert on safety and mission assurance. He participated in the EVA Project's System Requirements Review in April 2007 and the System Definition Review in May 2008. We did not find evidence of him informing the EVA Systems SRB Chairperson or the NASA Review Manager of Honeywell's teaming with Oceaneering for the CSSS contract, nor did we find evidence of Agency officials reviewing his employment status for a potential conflict of interest prior to award of the CSSS contract. As of October 1, 2008, he remained a member of the EVA Systems SRB.

**Termination of CSSS Contract.** NASA terminated and subsequently rebid the CSSS contract. On July 14, 2008, Exploration Systems and Technology filed a bid protest with GAO stating that NASA's evaluation process on the CSSS proposals contained prejudicial errors. Included in the bid protest was a claim that Oceaneering possessed an unfair competitive advantage because employees of Oceaneering subcontractors served as members of the EVA Systems SRB. On July 21, 2008, Exploration Systems and Technology filed a supplement to the bid protest that identified additional procurement irregularities. After the GAO bid protest was filed, NASA announced it had determined that a compliance issue with the procurement process required termination of the contract with Oceaneering. Based on the compliance issue, the Agency decided to re-open the bid process to the two bidding companies.

**Potential for Future Violations.** Procurement Integrity Act violations could potentially occur on future solicitations, such as the CxP's Ground Processing Services Contract,

because NASA does not have adequate procedures to identify and monitor the independence of SRB members. The contract is for ground processing, assembly, integration, test, launch, and recovery services to support the Ares I Crew Launch Vehicle and the Orion Crew Exploration Vehicle. NASA plans to release a request for proposal during the spring of 2009 and award the contract in the spring of 2010. This procurement could place one or more Ground Operations SRB members in violation of the Procurement Integrity Act because NASA has not adequately verified members' independence. For example, one member of the Ground Operations SRB works for ASRC Aerospace, a company currently providing engineering, configuration management, and project management services to the Ground Operations Project under a contract with Kennedy Space Center. If ASRC Aerospace competes for the Ground Processing Services Contract, the SRB member could be in violation of the Procurement Integrity Act because of information the member would have had access to during the life-cycle reviews.

## Conclusion

In establishing the CxP SRBs, NASA failed to abide by the legal requirements associated with establishing Federal advisory committees. NASA established an inadequate framework for assessing conflicts of interest. In the absence of an appropriate set of internal controls, almost one-third, 21 of 66 non-Federal SRB members, had conflicts of interest resulting in a lack of assurance that their individual views were not subject to inappropriate bias or that these persons did not seek advantage from their SRB participation. NASA could reduce the risk of SRBs that include non-Federal Government employees with conflicts of interest by establishing and implementing formal procedures and processes for checking the independence of nominees.

## Management Actions

In November 2008, we met with representatives from the Program Analysis and Evaluation Office and IPAO to discuss actions the Agency was taking in response to recommendations in our April 2008 report on the Orion SRB. After further analysis and consultation with the OGC, the Agency decided to pause most CxP SRBs activity while it addressed the FACA and conflict of interest compliance issues. The Associate Administrator for Program Analysis and Evaluation stated in comments dated December 18, 2008, that since the issuance of our April 2008 report, the interim configuration of the Orion SRB had been redesigned to not trigger FACA requirements. Although in discussions with senior management the Associate Administrator stated that organizing the SRBs under FACA remains an option, OGC stated in a February 6, 2009, meeting with OIG that the Agency is focusing on three other options that call for SRBs composed of (1) all civil service employees who would provide a consensus opinion; (2) civil service employees, with support from subject matter experts, who would provide a

consensus opinion; and (3) a mix of civil service and non-Federal employees who would render individual opinions rather than a consensus opinion.

Further, to prevent programs and projects from experiencing the potentially negative impacts of having SRBs with possibly biased SRB members, the Agency plans to adopt an annual review process for future SRB members similar to the process Federal employees undergo annually. IPAO plans to update the “Personal, External, and Organizational Independence, and Political Influence Self-Assessment” form to incorporate relevant elements of the Office of Government Ethics Form 450 “Confidential Financial Disclosure Report,” which requires employees to provide information on reportable assets or sources of income, reportable liabilities, outside positions, and reportable agreements or arrangements. (See Appendix C for IPAO’s proposed updated form.) We intend to examine closely the Agency’s plans for addressing these issues to ensure compliance with Federal law and to assure that the redesigned system of internal controls protects the integrity of SRB activities.

## **Recommendations, Management’s Response, and Evaluation of Management’s Response**

**Recommendation 1.** The Associate Administrator for Program Analysis and Evaluation, prior to reactivating the Constellation Standing Review Boards (SRBs), should assure that all SRBs are established in a manner consistent with Federal law and that the Standing Review Board Handbook includes procedures that ensure identification of SRB members who have conflicts of interest. The procedures should include, but not be limited to, methods to determine whether nominees are employees of companies competing for work or performing work on behalf of the program or project under review. In addition, Agency ethics officials should be required to sign off on the independence of SRB participants and an annual review to verify board members’ independence should be conducted.

**Management’s Response.** The Associate Administrator for Program Analysis and Evaluation concurred with our recommendation and incorporated procedures into the revised Standing Review Board Handbook and NPR 7120.5D that will ensure identification of SRB members who have conflicts of interest. The procedures include methods to determine whether nominees are employed by companies performing work for the program or project under review. The Office of General Counsel reviewed the procedures to ensure that SRBs will be established in a manner consistent with Federal law. In addition, ethics officials will verify the independence of SRB participants and the Independent Program Assessment Office and the Office of General Counsel will review board members’ independence annually. The Associate Administrator expects that the Constellation SRBs will be reestablished in a manner consistent with Federal law and revised agency guidance by April 30, 2009.

**Evaluation of Management's Response.** Management's actions are responsive. The recommendation is resolved and will be closed upon completion and verification of management's corrective action.

**Recommendation 2.** NASA's Chief Engineer should revise NASA Procedural Requirements 7120.5D, "NASA Space Flight Program and Project Management Requirements," to include reference to, or inclusion of, the procedures incorporated into the Standing Review Board Handbook.

**Management's Response.** NASA's Chief Engineer concurred with our recommendation and is in the process of revising NPR 7120.5D with a NASA Interim Directive. The Directive will reference the Standing Review Board Handbook as the source of guidance for establishing SRBs and assessing SRB members for potential conflicts of interest. Estimated completion date for the Directive is June 30, 2009.

**Evaluation of Management's Response.** Management's action is responsive. The recommendation is resolved and will be closed upon completion and verification of management's corrective action.

## Scope and Methodology

We performed the review from April 2008 through January 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our review objectives. We performed fieldwork at Johnson Space Center and Langley Research Center.

During our audit of the Orion Crew Exploration Vehicle Project, we found that the Orion SRB was not established in accordance with the Federal Advisory Committee Act; NASA Policy Directive 1150.11, “Federal Advisory Committee Act Committees,” September 22, 2004; or NPR 7120.5D, “NASA Space Flight Program and Project Management Requirements,” March 6, 2007. We reported this finding in “Final Memorandum on the Standing Review Board for the Orion Crew Exploration Vehicle Project” (IG-08-018, April 28, 2008). Based on that prior audit finding, we initiated this review to include all CxP SRBs (except the Altair SRB because it was temporary, from June 2008 to October 2008, and comprised members of the other projects’ SRBs).

To determine the independence of the other CxP projects’ SRBs, we focused on whether NASA officials took appropriate actions to identify independence impairments or conflicts-of-interest issues and adequately reviewed and mitigated those issues. We also reviewed internal controls as they related to the establishment and operation of the SRB.

We reviewed NPR 7120.5D and IPAO’s draft “SRB Handbook, Version 1.0,” August 1, 2007, for Agency policies, procedures, and guidelines pertaining to independence of SRB members. We also reviewed Title 41, United States Code, Chapter 7, Section 423, “Restrictions on Disclosing and Obtaining Contractor Bid or Proposal Information or Source Selection Information,” for Federal requirements pertaining to access and release of source selection information.

We reviewed the IPAO “Personal, External, and Organizational Independence, and Political Influence Self-Assessment” forms completed by members of the CxP and associated projects’ SRBs to identify potential conflicts of interest. We also looked for potential conflicts of interest by reviewing SRB members’ biographies contained in nomination letters that the IPAO submitted to convening authorities for each Constellation-related SRB.

We interviewed the Director of the IPAO and review managers for each of the Constellation-related SRBs to find out what steps they took to identify, review, and mitigate conflicts of interest associated with SRB members. We interviewed five members of the EVA Systems SRB to verify information they provided on their respective self-assessments. We also talked with officials with Johnson Space Center's Office of Procurement and Office of Chief Counsel regarding potential for violations of the Procurement Integrity Act associated with the CSSS contract.

**Use of Computer-Processed Data.** We did not use computer-processed data to perform this portion of the review.

## Review of Internal Controls

We reviewed and evaluated internal controls the Agency established and implemented to identify, review, and mitigate conflicts of interest on the part of SRB members. We identified a weakness in the Agency's identification of SRB members for conflicts of interest. Implementing the recommendations in this report should improve the internal controls over the identification of SRB members with conflicts of interest.

## Prior Coverage

### Government Accountability Office

During the last 5 years, the Government Accountability Office issued one report of particular relevance to the subject of our review: "Federal Advisory Committee Act: Issues Related to the Independence and Balance of Advisory Committees" (GAO-08-611T, April 2, 2008). Unrestricted reports can be accessed over the Internet at <http://www.gao.gov>.

### National Aeronautics and Space Administration

Our office issued the "Final Memorandum on the Standing Review Board for the Orion Crew Exploration Vehicle Project" (Report No. IG-08-018, April 28, 2008). We determined that, although the Orion SRB met the definition of a committee that should be established and operated in accordance with Federal Advisory Committee Act, the Agency did not require the SRB to comply with the Act's requirements. In addition, 6 (32 percent) of the Orion SRB's 19 members were not independent of the Orion Project, as required by NPR 7120.5D and the draft SRB Handbook. Unrestricted reports can be accessed over the Internet at <http://oig.nasa.gov/audits/reports/FY08>.

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## INITIAL SELF-ASSESSMENT

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### **Personal, External, and Organizational Independence, and Political Influence Self-Assessment**

Instructions to potential team member:

1. Read the following questions in each section below and assess your personal situation as it applies to the review team for which you are being considered.
2. Check the appropriate response.
3. If your response is “yes,” please provide a detailed explanation of the circumstances for the specific situation that may impair you. While a “yes” answer will not automatically disqualify you from consideration, a review committee will consider your response(s) to determine your fitness for participation. Hence, a detailed explanation for each “yes” response is necessary to render an informed decision.

When you have completed the self-assessment, sign, date, and fax this form to Michelle Calloway 757-864-3927.

Disclosed impairments are not automatic grounds for disqualifying a potential team member from serving on an independent review team. Upon adjudication, the IPAO team lead will make a recommendation to the IPAO Director who make the final determination and approve/disapprove each candidate’s membership.

#### **I. Personal Independence**

##### **Conflicting Financial Interests**

Will the contemplated consulting work in support of a particular program or project review have an effect on your own personal financial interests? Are you a stockholder in a company that receives funding from the program or project being reviewed? Do you own a patent or hold a copyright to a product or service or invention that is being considered for use by a program or project being reviewed? You also must be concerned about the financial interests of your spouse, your minor children, and outside persons or businesses that employ you. You should be concerned if anything you are asked to work on would affect them.

No.  Yes. [Explain circumstances in detail and use additional sheets if necessary]: \_\_\_\_\_.

### **Seeking Other Employment**

Are you job-hunting, seeking employment or engaged in discussions with an organization, contractor, business entity or prospective new employer that could directly benefit from the program or project being reviewed? Have you received an offer of employment from a NASA contractor, subcontractor, or grantee in connection with a program or project being reviewed by NASA?

No.  Yes. [Explain circumstances in detail and use additional sheets if necessary]: \_\_\_\_\_.

### **Outside Activities and Public Speaking**

Have you ever written an article, published a paper, or taught a class that expresses a personal opinion, advocates a viewpoint, or proffers a professional judgment on the merits of the program or project being reviewed, or on the merits of the products and services associated with the program or project being reviewed? Do you belong to or are you a member of an organization that receives charitable contributions, gifts, monies, compensation, or honorariums from a contractor or person(s) that directly benefit from the program or project being reviewed?

No.  Yes. [Explain circumstances in detail and use additional sheets if necessary]: \_\_\_\_\_.

## **II. External Independence**

### **Impartiality in Performing Official Duties**

Will the contemplated consulting work being performed in support of a particular program or project review give rise to an “improper appearance,” that is, make a reasonable person who knew the circumstances of the situation (and had knowledge of the facts) legitimately question your fairness? For example, your fairness might reasonably be questioned if you were to perform an independent assessment of a program or project that could directly benefit a family member, relative, friend, or business partner.

No.  Yes. [Explain circumstances in detail and use additional sheets if necessary]: \_\_\_\_\_.

### **Undo Influence and Coercion**

Do you feel you are unable to perform your work unfettered, uncompromisingly, openly, and effectively and free from schedule pressures, resource constraints, and opposing institutional, organizational or cultural forces? Do you feel you are unable to perform your work unfettered, uncompromisingly, openly, and effectively without fear of retribution, intimidation, threat, or prohibited personnel practices, including reprisal for whistle-blowing, as defined by law at [§ 2302\(b\) of title 5](#) of the United States Code (U.S.C.)?

No.  Yes. [Explain circumstances in detail and use additional sheets if necessary]: \_\_\_\_\_.

### **III. Organizational Independence**

#### **Current or Former Employee**

Have you ever been a superior or subordinate of an employee of a program or project being reviewed? Have you ever directly worked for the program or project being reviewed or been an employee of a contractor that receives funding from the program or project being reviewed?

No.  Yes. [Explain circumstances in detail and use additional sheets if necessary]: \_\_\_\_\_.

#### IV. Political Influence

Do you serve as an officer, director, or trustee of a for-profit organization or a non-profit political advocacy group or do you belong to or support a political party, lobby, association, organization, group, or action committee that seeks to advance, promote or advocate legislation in support of a program or project being reviewed?

No.  Yes. [Explain circumstances in detail and use additional sheets if necessary]: \_\_\_\_\_.

#### V. Certification:

I, \_\_\_\_\_, have completed this self-assessment of my fitness to serve on the Orion Crew Exploration Vehicle Project Standing Review Board. I have read and answered all the questions and I certify that the statements I have made on this form and all attached statements are true, complete, and correct to the best of my knowledge.

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Date**

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## PROPOSED SELF-ASSESSMENT

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**BACKGROUND INFORMATION, CONFIDENTIAL CONFLICT OF INTEREST  
DISCLOSURE AND NON-DISCLOSURE CERTIFICATION**  
**SRB Membership Background Information, Confidential Conflict of  
Interest Disclosure and Non-Disclosure Certification**

BACKGROUND INFORMATION, CONFIDENTIAL CONFLICT OF INTEREST DISCLOSURE, AND NON-  
DISCLOSURE CERTIFICATION

NAME: \_\_\_\_\_ TELEPHONE: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
EMAIL ADDRESS: \_\_\_\_\_  
CURRENT EMPLOYER: \_\_\_\_\_  
PROGRAM/PROJECT SRB: \_\_\_\_\_

There are three parts to this form, Part I Background Information, Part II Confidential Conflict of Interest Disclosure, and Part III Certification. Complete all parts, sign and date this form on the last page, and return the form to \_\_\_\_\_. Retain a copy for your records.

**PART I BACKGROUND INFORMATION**

**INSTRUCTIONS**

Please provide a curriculum/resume that identifies your **relevant experience**, organizational affiliations, government service, etc. to this SRB activity. In addition, please specifically respond to the three specific areas identified below to facilitate an overall assessment of any biases that may exist relative to this SRB activity.

I. **ORGANIZATIONAL AFFILIATIONS.** Report your relevant current business relationships (as an employee, owner, officer, director, consultant, etc.) and your relevant current remunerated or volunteer non-business relationships (e.g., professional organizations, trade associations, public interest or civic groups, etc.).

II. **OTHER SUPPORT.** Report relevant information regarding both public and private sources of current support (other than your present employer), including sources of funding, equipment, facilities, etc.

III. **ADDITIONAL INFORMATION.** If there are relevant aspects of your background or present circumstances not addressed above that might reasonably be construed by others as affecting your judgment in matters within the assigned task of the SRB or panel on which you have been invited to serve, and therefore might constitute an actual or potential conflict of interest or source of bias, please describe them briefly. This could include your relationships with individuals (rather than organizations) involved in the subject of the SRB activity.

**SPECIFIC AFFILIATIONS, SUPPORT AND OTHER INFORMATION**



PART II CONFIDENTIAL CONFLICT OF INTEREST DISCLOSURE

INSTRUCTIONS

It is essential that the work of SRBs not be compromised by any significant conflict of interest. For this purpose, the term "conflict of interest" means any financial or other interest which conflicts with the service of the individual because it (1) could significantly impair the individual's objectivity or (2) could create an unfair competitive advantage for any person or organization. Additional information regarding potential biases and conflicts of interest are provided in the *NASA Policy on Standing Review Board (SRB) Composition, Balance and Conflicts Of Interest*

1. **RELATIONSHIPS TO THE PROGRAM/PROJECT(S) BEING EVALUATED.** Taking into account your interests and the interests of other individuals with whom you share substantial common financial interests (e.g., spouse, close research colleagues and collaborators, business partners, etc.) --

(a) Do you or such others receive current *financial support* (e.g., research and/or development grants or contracts, procurement contracts, consulting contracts, other grant support, etc.) from the program/project(s) being evaluated that could be directly affected by the SRB's report (e.g., possible termination of current agreements or loss of reasonably anticipated future funding)?

(b) Do you or such others receive substantial current *non-financial support* (e.g., equipment, facilities, industry partnerships, research assistants and other research personnel, etc.), from the program/project(s) being evaluated that could be directly affected by the SRB's report?

(c) Do you or such others have any *other current financial interest* (e.g., patent rights, interests in partnerships and commercial ventures, etc.) obtained from or through the program/project(s) being evaluated that could be directly affected by the SRB's report?

If the answer to all of the above questions under RELATIONSHIPS TO THE PROGRAM/PROJECT(S) being evaluated is either "no" or "not applicable," check here \_\_\_\_ (NO).

If the answer to any of the above questions under RELATIONSHIPS TO THE PROGRAM/PROJECT(S) being evaluated is "yes," check here \_\_\_\_ (YES), and briefly describe the circumstances on the last page of this form.

2. **INVESTMENT INTERESTS.** Taking into account stocks, bonds, and other financial instruments and investments including partnerships (but excluding broadly diversified mutual funds and any investment or financial interest valued at less than \$10,000), if the reports resulting from this SRB activity were to provide the basis for action or inaction with respect to changes in the program/project(s) being reviewed and evaluated --

(a) Do you or your spouse or minor children own directly or indirectly (e.g., through a trust or an individual account in a pension or profit-sharing plan) any stocks, bonds or other financial instruments or investments that could be affected, either directly or by a direct effect on the business enterprise or activities underlying the investments?

(b) Do you have any other financial investments or interests such as commercial business interests (e.g., sole proprietorships), investment interests (e.g., stock options), or investment relationships (e.g., involving parents or grandchildren) that could be affected, either directly or by a direct effect on the business enterprise or activities underlying the investments?

If the answer to all of the above questions under INVESTMENT INTERESTS is either "no" or "not applicable," check here \_\_\_\_ (NO).

If the answer to any of the above questions under INVESTMENT INTERESTS is "yes," check here \_\_\_\_ (YES), and briefly describe the circumstances on the last page of this form.

3. **PROPERTY INTERESTS.** Taking into account real estate and other tangible property interests, as well as intellectual property (patents, copyrights, etc.) interests, if the reports resulting from this SRB activity were to provide the basis for action or inaction with respect to changes in the program/project(s) being reviewed and evaluated --

(a) Do you or your spouse or minor children own directly or indirectly any such property interests that could be directly affected?

(b) To the best of your knowledge, do any others with whom you have substantial common financial interests (e.g., employer, business partners, relatives) own directly or indirectly any such property interests that could be directly affected?

If the answer to all of the above questions under PROPERTY INTERESTS is either "no" or "not applicable," check here \_\_\_\_ (NO).

If the answer to any of the above questions under PROPERTY INTERESTS is "yes," check here \_\_\_\_ (YES), and briefly describe the circumstances on the last page of this form.

4. **OTHER INTERESTS.** (a) If the reports resulting from this SRB activity were to recommend changes in the program/project(s) being evaluated --

(i) If you are employed or self-employed (or your spouse is employed or self-employed), could your current employment or self-employment (or your spouse's current employment or self-employment) be directly affected?

(ii) To the best of your knowledge, could any significant financial interests of your (or your spouse's) employer or, if self-employed, your (or your spouse's) significant clients and/or business partners be directly affected?

(iii) If you are an officer, director or trustee of any corporation or other legal entity, could the financial interests of that corporation or legal entity be directly affected?

(iv) If you are a consultant (whether full-time or part-time), could there be a direct effect on any of your current consulting relationships?

(b) Do you have a consulting relationship with a sponsor, grantee, or contractor of the program/project being reviewed and evaluated that is directly related to the subject matter of the program/project review and evaluation for which this disclosure form is being prepared (e.g., a consulting relationship to provide assistance to the sponsor, grantee, or contractor with respect to the program/project review and evaluation)?

(c) Is a central purpose of the program/project review and evaluation a critical review and evaluation of your own work or that of your employer?

(d) Are you an official or employee of an agency or organization, which is a sponsor of the program/project that is being reviewed and evaluated and/or a sponsor of this program/project review and evaluation SRB activity?

(e) Do you have any existing professional obligations (e.g., as an officer of a scientific or engineering society) that effectively require you to publicly defend a previously established position on an issue that is relevant to the functions to be performed in this SRB activity?

(f) To the best of your knowledge, will your participation in this SRB activity enable you to obtain access to a competitor's or potential competitor's confidential proprietary information?

(g) If you are or have ever been a U.S. Government employee (either civilian or military), to the best of your knowledge are there any federal conflict of interest restrictions that may be applicable to your service in connection with this SRB activity?

(h) Could your service on the SRB on which you have been invited to serve create a specific financial or commercial competitive advantage for you or others with whom you have substantial common financial interests?

(i) If the SRB activity for which this form is being prepared involves reviews of specific applications and proposals for contract, grant, fellowship, etc. awards to be made by sponsors, do you or others with whom you have substantial common financial interests, or a familial or substantial professional relationship, have an interest in receiving or being considered for awards that are currently the subject of the review being conducted by this SRB?

(j) If the SRB activity for which this form is being prepared involves developing requests for proposals, work statements, and/or specifications, etc., are you interested in seeking an award under the program/project for which the SRB on which you have been invited to serve is developing the request for proposals, work statement, and/or specifications -- or, are you employed in any capacity by, or do you have a financial interest in or other economic relationship with, any person or organization that to the best of your knowledge is interested in seeking an award under this program/project?

If the answer to all of the above questions under OTHER INTERESTS is either "no" or "not applicable," check here \_\_\_\_ (NO).

If the answer to any of the above questions under OTHER INTERESTS is "yes," check here \_\_\_\_ (YES), and briefly describe the circumstances below.

EXPLANATION OF "YES" RESPONSES:

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**PART III CERTIFICATION**

*During your period of service in connection with the activity for which this form is being completed, any changes in the information reported, or any new information, which needs to be reported, shall be reported promptly by written or electronic communication to the \_\_\_\_\_ Program Manager.*

\_\_\_\_\_  
YOUR SIGNATURE

\_\_\_\_\_  
DATE

Reviewed by: \_\_\_\_\_

\_\_\_\_\_  
Date

Reviewed by: \_\_\_\_\_  
SRB Review Manager

\_\_\_\_\_  
Date

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## MANAGEMENT COMMENTS

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National Aeronautics and  
Space Administration  
**Headquarters**  
Washington, DC 20546-0001



February 18, 2009

Reply to Attn of: **Office of Program Analysis and Evaluation**

**TO:** Assistant Inspector General for Auditing

**FROM:** Associate Administrator for Program Analysis and Evaluation

**SUBJECT:** NASA Response to the Office of Inspector General's Final Discussion Draft Audit Report on NASA's Constellation Standing Review Boards Established Without Due Regard for Member Independence Requirements (Report No. S-08-021-00)

In response to the recommendations contained in the Discussion Draft Report on Constellation Standing Review Board (SRB) Member Independence Requirements, we have developed the coordinated responses below with the Office of the Chief Engineer (OCE) and the Office of General Counsel (OGC). These responses are to the 16 January 2009 Draft, and reflect policy and process changes since that date.

**Recommendation 1.** Prior to reactivating the Constellation Standing Review Boards (SRBs), the Associate Administrator for Program Analysis and Evaluation should assure that all SRBs are established in a manner consistent with Federal law and that the Standing Review Board Handbook includes procedures that ensure identification of SRB members who have conflicts of interest. The procedure should include, but not be limited to, methods to determine whether nominees are employed by companies performing work for the program or project under review. In addition, Agency ethics officials should be required to sign off on the independence of SRB participants and an annual review to verify board members' independence should be conducted.

**Response.** The Office of the General Counsel has reviewed the policy and procedures in Agency policy, "NASA Space Flight Program and Project Management Requirements" (NPR 7120.5D), and the Standing Review Board Handbook (planned for first quarter of Calendar Year 2009) guiding the establishment of SRBs to ensure that they will be established in a manner consistent with Federal law. The SRB Handbook includes procedures that ensure identification of SRB members who have conflicts of interest.

The handbook includes NASA's procedures to determine whether nominees are employed by companies performing work for the program or project under review.

Ethics officials will verify SRB participant independence or waivers for those whose value to the SRB's work is viewed by the convening authorities to make it necessary to seek a waiver to enable an individual to participate on an SRB. As described in the handbook, previously provided to the Office of the Inspector General in draft form, the IPAO and OGC will review SRB members with regard to their independence on an annual basis.

**Recommendation 2.** NASA's Chief Engineer should revise NASA Procedural Requirements 7120.5D, inclusion of, the procedures incorporated into the Standing Review Board Handbook.

**Response.** The OCE is in the process of updating 7120.5D with a NASA Interim Directive (NID) that will establish the Standing Review Board Handbook as the source of guidance for establishing SRBs and assessing SRB members for potential organizational or personal conflict of interest. The NID is expected to be completed in the second quarter of Calendar Year 2009.



W. Michael Hawes

Concurred by:

Michael C. Wholley  
Michael C. Wholley  
General Counsel

Concurred by:

Michael Ryschkewitsch 29 Jan 2009  
Michael Ryschkewitsch  
Chief Engineer

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