

**INDEPENDENT AUDIT OF THE NATIONAL  
AERONAUTICS AND SPACE ADMINISTRATION**

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**JOINT HEARING**  
BEFORE THE  
SUBCOMMITTEE ON INVESTIGATIONS AND  
OVERSIGHT  
AND THE  
SUBCOMMITTEE ON SPACE AND AERONAUTICS  
COMMITTEE ON SCIENCE AND  
TECHNOLOGY  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

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DECEMBER 3, 2009

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**Serial No. 111-68**

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Printed for the use of the Committee on Science and Technology



Available via the World Wide Web: <http://www.science.house.gov>

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U.S. GOVERNMENT PRINTING OFFICE

53-691PDF

WASHINGTON : 2010

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# CONTENTS

December 3, 2009

	Page
Witness List .....	2
Hearing Charter .....	3

## Opening Statements

Statement by Representative Brad Miller, Chairman, Subcommittee on Investigations and Oversight, Committee on Science and Technology, U.S. House of Representatives .....	23
Written Statement .....	24
Statement by Representative Gabrielle Giffords, Chairwoman, Subcommittee on Space and Aeronautics, Committee on Science and Technology, U.S. House of Representatives .....	26
Written Statement .....	27
Statement by Representative Paul C. Broun, Ranking Minority Member, Subcommittee on Investigations and Oversight, Committee on Science and Technology, U.S. House of Representatives .....	25
Written Statement .....	25
Statement by Representative Pete Olson, Ranking Minority Member, Subcommittee on Space and Aeronautics, Committee on Science and Technology, U.S. House of Representatives .....	27
Written Statement .....	28

## Witnesses:

Hon. Paul K. Martin, Inspector General, National Aeronautics and Space Administration, Accompanied by Tom Howard, Deputy Inspector General, National Aeronautics and Space Administration	
Oral Statement .....	30
Written Statement .....	31
Daniel J. Murrin, Partner, Assurance and Advisory Business Services, Ernst & Young, LLP	
Oral Statement .....	36
Written Statement .....	37
Hon. Elizabeth Robinson, Chief Financial Officer, National Aeronautics and Space Administration	
Oral Statement .....	47
Written Statement .....	49



**INDEPENDENT AUDIT OF THE NATIONAL  
AERONAUTICS AND SPACE ADMINISTRATION**

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**THURSDAY, DECEMBER 3, 2009**

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON INVESTIGATIONS & OVERSIGHT, AND  
SUBCOMMITTEE ON SPACE AND AERONAUTICS,  
COMMITTEE ON SCIENCE AND TECHNOLOGY  
*Washington, DC.*

The Subcommittees met, pursuant to call, at 2:46 p.m., in Room 2318 of the Rayburn House Office Building, Hon. Brad Miller [Chairman of the Subcommittee on Investigations and Oversight] presiding.

Subcommittee on Investigations and Oversight and  
Subcommittee on Space and Aeronautics

Joint hearing on

**Independent Audit of the  
National Aeronautics and Space Administration**

Thursday, December 3, 2009  
2:00 p.m. – 4:00 p.m.  
2318 Rayburn House Office Building

**Witness List**

**The Honorable Paul K. Martin**  
*Inspector General*  
*National Aeronautics and Space Administration*

Accompanied by  
**Mr. Tom Howard**  
*Deputy Inspector General*  
*National Aeronautics and Space Administration*

**Mr. Dan Murrin**  
*Partner, Assurance and Advisory Business Services*  
*Ernst & Young LLP*

**The Honorable Elizabeth Robinson**  
*Chief Financial Officer*  
*National Aeronautics and Space Administration*

**U.S. HOUSE OF REPRESENTATIVES  
COMMITTEE ON SCIENCE AND TECHNOLOGY  
SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT  
AND  
SUBCOMMITTEE ON SPACE AND AERONAUTICS**

**Independent Audit of the  
National Aeronautics and Space Administration**

THURSDAY, DECEMBER 3, 2009  
2:00–4:00 P.M.  
2318 RAYBURN HOUSE OFFICE BUILDING

**Purpose**

Each year, federal agencies are required to obtain an audit of their consolidated financial statements from independent auditing firms. The National Aeronautics and Space Administration (NASA) received the report of Ernst & Young evaluating the Fiscal Year 2009 (FY09) financial statements on November 13, 2009. Ernst & Young determined that “. . . the scope of our work was not sufficient to enable us to express, and we do not express, an opinion on the consolidated balance sheets . . .” This constitutes a “disclaimed opinion”—one in which the auditing firm finds a material weakness in the accounting processes of the agency so severe that they cannot reliably verify the agency’s financial accounts. The Subcommittees on Investigations and Oversight and Space and Aeronautics will hold a hearing to determine what NASA needs to do to continue improving its financial control and accounting system.

**Witnesses**

*Hon. Paul Martin  
Inspector General  
National Aeronautics and Space Administration (NASA)*

accompanied by Hon. Tom Howard, Deputy Inspector General

Confirmed by the Senate as NASA Inspector General on November 20, 2009, Mr. Martin served as the Deputy Inspector General at the Department of Justice (DOJ) for 6 years. From 2001 to 2003, he served as the Counselor to the Inspector General, and previously as Special Counsel to the Inspector General from 1998 to 2001. Earlier Martin spent 13 years at the U.S. Sentencing Commission, and began his career as a reporter with The Greenville News in Greenville, South Carolina.

*Mr. Dan Murrin  
Partner, Assurance and Advisory Business Services  
Ernst & Young LLP*

Mr. Murrin has been the primary Ernst & Young partner managing the NASA audit team since the company won the independent audit contract in 2004. Murrin served as a Professional Accounting Fellow for 2 years at the Government Accountability Office (GAO) during passage and initial startup of the Chief Financial Officers Act of 1990. He then resumed his career at Ernst & Young in October 1992. He has 30 years total experience relating to public sector auditing issues.

*Hon. Elizabeth Robinson  
Chief Financial Officer  
National Aeronautics and Space Administration*

Dr. Robinson assumed her job as NASA’s Chief Financial Officer on November 9, 2009, following her confirmation by the Senate. In her previous position, she served as Assistant Director for Budget at the Office of Management and Budget. She had also held the post of Deputy Director at the Congressional Budget Office. In her

early career, Dr. Robinson served on the Science and Technology Committee evaluating Department of Energy programs and policies.

#### **Findings in the FY09 Audit: Material Weakness**

Ernst & Young, NASA's auditors, cited the continuing problem of valuing NASA's older property, plant and equipment (PP&E)—the Space Shuttle and the International Space Station—as a material weakness.<sup>1</sup> This situation has existed for a number of years and is a result of misinterpreting guidance on property management accounting during the past decade. The auditors credit NASA with a concerted multi-year effort to properly classify these assets and describe the agency's progress in establishing proper valuations. However, the valuation of property in the International Space Station and Space Shuttle programs still failed to meet the requirements of the Federal Accounting Standards Advisory Board (FASAB) during the period of the audit, leading to Ernst & Young's disclaimer of opinion on the financial statements.

Until October, the Federal accounting standard for PP&E<sup>2</sup> required agencies to use actual cost data for these items listed on its balance sheets. NASA, like the Department of Defense (DOD), lacked the documentation needed to satisfy this requirement to the satisfaction of auditors. In such cases, the standard did provide for agency estimates of asset values, but this was to be based on actual cost data. Agencies with significant legacy assets attempting to comply with the strict interpretation of the standard were spending significant funds to locate available documentation and reconstruct the needed data, and in the end were not producing measurably better results.

Responding to DOD's concerns about its inability to meet the standard, FASAB developed and issued "Statement of Federal Financial Accounting Standards 35 (SFFAS 35)." The Board amended the previous guidance on PP&E to allow "reasonable" estimates of historical costs as a means of valuing assets. The standard also offered more detailed guidance on the basis for estimates. In doing so, the Board indicated that actual data was still preferred and should underlie an agency's estimates where possible. Further, agencies using estimates were encouraged to develop financial systems that would capture necessary information on transactions going forward. Ernst & Young's report notes that NASA is working with other agencies to determine appropriate methods for implementing SFFAS 35, and that it has updated its internal controls on property beginning with contracts effective in Fiscal Year 2008 (October 1, 2007).

The auditors made two recommendations relating to this material weakness. First, NASA needs to continue evaluating how it develops estimates allowed by SFFAS 35, especially when actual data is missing or questionable. NASA should also seek to avoid depending on contractor-provided estimates, trying instead to match outlays to particular property, plant or equipment if possible. The auditors encourage additional effort for older contracts lacking newer requirements for tracking property, plant and equipment. The second recommendation calls for "robust and rigorous review" as NASA continues to develop estimation techniques and seeks to assure completeness of documentation. Special attention to Center internal control processes for property is also suggested to insure that necessary information on property, plant and equipment is now captured.

#### **Findings in the FY09 Audit: Significant Deficiencies**

The audit report also cited two significant deficiencies:<sup>3</sup> 1) the agency's method for estimating its liabilities for environmental cleanup and 2) the financial management system is not in substantial compliance with the Federal Financial Managers Integrity Act (FFMIA).

According to the audit report, NASA has an estimated \$922 million in environmental liabilities as of the end of Fiscal Year 2009. While the auditors note efforts by the agency to improve these estimates and implement recommendations in last year's audit, there were still ". . . weaknesses in NASA's ability to generate an auditable estimate on a timely basis of its UEL [unfunded environmental liability] environmental cleanup costs and its environmental liabilities associated with PP&E." These estimates were prepared quickly and NASA told Ernst & Young that more training and greater control over the development of estimates is needed. Ex-

<sup>1</sup> ". . . [A] reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis."

<sup>2</sup> Statements of Federal Financial Accounting Standards 6.

<sup>3</sup> "[A] deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance."

aming the software used for estimates of some twenty percent of environmental liabilities, the audit questioned whether it was generating reliable outputs.

The audit also noted that NASA developed an estimation process that assumed that NASA would face a particular environmental liability during a 30-year window, unless there was available data to demonstrate that the agency was responsible for cleanups over a longer period of time. By making this assumption, the total environmental liability was reduced by about 25 per cent in Fiscal Year 2009. Ernst & Young questioned the process by which this outcome was reached, and specifically raised concern that “[t]he estimate was compiled and aggregated by EMD [the Environmental Management Division] with little support from the individual project managers, and OCFO [the Office of the Chief Financial Officer] was not aware of the process.”

Relating to the system weaknesses, the auditors state that integration between the core financial module and the real property module is lacking. They also question whether the tracking of changes within the system may be inadequate and that compensating external reviews to reconcile transactions and review integrity of data are not in place. While the auditors do not believe these control weaknesses would result in serious problems with the financial statements, NASA might be exposed to “. . . risks regarding safeguarding of assets.” These items led the auditors to declare that the system falls short of FFMIA requirements. The auditors recommend correcting these issues.

#### Agency response

NASA’s response declared that the agency “is committed” to resolving the issues relating to legacy PP&E valuation using the guidance provided by SFFAS 35. It also stated that the significant deficiencies would also be addressed.

#### Background

In 1988, NASA made its first attempt to develop an integrated financial management system; the NASA Accounting and Financial Information System (NAFIS). The program ran into trouble, as GAO noted in a report to then—Administrator Richard Truly: the cost estimate had jumped from \$25.9 million to \$45.7 million in just over 2 years.<sup>4</sup> In May 1992, the Subcommittee on Investigations and Oversight held a hearing at which GAO detailed a number of major weaknesses in NASA financial management, including cases where budgetary obligations were made without assuring sufficient resources were available—violations of the Anti-Deficiency Act. GAO also noted that noted that NASA’s systems were “. . . nonintegrated, nonstandard, not fully automated, requiring multiple data entry and lengthy reconciliations . . .”<sup>5</sup>

NASA then signed a fixed-price agreement in September 1997 with KPMG to use a commercial product to develop a new accounting system. In this case the number of changes needed to conform to government accounting requirements rapidly brought the program to a halt. Three years and \$131 million into the contract NASA terminated the effort.<sup>6</sup>

During this time, as GAO testified before the Government Reform Committee in March 2002, NASA was receiving unqualified—or “clean”—opinions from Arthur Andersen, then the independent auditor. It was therefore somewhat of a shock to the incoming Administrator, Sean O’Keefe, when the agency’s newly-hired audit team from PriceWaterhouseCoopers submitted a disclaimer on the Fiscal Year 2001 audit for major internal control weaknesses and declared that the financial management systems were not in compliance with FFMIA.<sup>7</sup> This episode badly affected re-

<sup>4</sup> GAO/AFMD-91-74, August 21, 1991; p. 1.

<sup>5</sup> *Window on Waste: Atrophy in NASA Management*, Serial 142, 102nd Congress; May 7, 1992; p. 31.

<sup>6</sup> GAO-01-258, January 2001; p. 12.

<sup>7</sup> GAO-02-551T, March 20, 2002; pp. 1-2.

lations between Mr. O’Keefe and Roberta Gross, then the NASA Inspector General.<sup>8</sup> It also led to early termination of the PriceWaterhouseCoopers auditing contract.<sup>9</sup>

Since April 2000, NASA had been working to finish its third attempt at a financial management system, the Integrated Enterprise Management Program. In this case NASA adopted the R/3 enterprise management program developed for U.S. government agencies by the SAP Corporation. The core financial module was implemented at the agency field centers between October 2002 and June 2003. It was not a smooth transition; as noted in the agency’s the Fiscal Year 2003 audit, auditors from PriceWaterhouseCoopers found in their last report that:

“ . . . NASA management identified significant errors in its June 30, 2003, financial statements resulting from the implementation of the IFMP [Integrated Financial Management Program] system. NASA management communicated that it would correct these errors in the September 30, 2003, financial statements. When NASA first prepared its September 30, 2003, financial statements, NASA concluded that these financial statements also contained significant errors. NASA’s efforts to correct these errors led to significant delays in its completion of the September 30, 2003, financial statements and its compilation of documentation in support of amounts and disclosures in these financial statements, including support for resolution of the June 30, 2003, financial statement errors. The documentation NASA provided in support of its September 30, 2003, financial statements was not adequate to support \$565 billion in adjustments to various financial statement accounts, which it identified as being related to the conversion of data to the IFMP system; \$2 billion in net adjustments to its Fund Balance with Treasury account, which had the effect of reducing NASA’s recorded balance so it equaled Treasury’s reported balance; and its corrections of the financial data errors that affected its June 30, 2003, and September 30, 2003, financial statements. Because of the delays in preparation of the September 30, 2003, financial statements, it was not possible to pursue further evidence in support of these transactions and amounts, nor was it possible to complete other planned auditing procedures within the reporting deadline established by Office of Management and Budget (OMB). Thus, we could not complete our audit and were unable to determine whether there were other matters that are required to be reported . . . .”

In the reports it has issued since becoming the agency’s independent auditor, Ernst & Young has traced the changes NASA has made to correct the four material weaknesses they first identified in their Fiscal Year 2004 report.<sup>10</sup> The Fiscal Year 2005 audit declared the improvements in the IFMP control environment “substantially complete.” In the Fiscal Year 2006 audit, the Fund Balance With Treasury material weakness was combined with the broader Financial Systems, Analyses and Oversight issue. This year’s audit left only the Property material weakness discussed earlier. As a small measure of NASA’s progress it only took Ernst and Young 12 pages in this year’s audit report compared to the 24 needed for its first report in Fiscal Year 2004. The bottom line is that while NASA received a disclaimed opinion, the agency has come a long way toward getting out of the woods on their accounting. With a solid implementation of SFFAS 35, NASA may get a qualified or clean opinion for the FY 2010 audit.

Attached for information are the Inspector General’s letter to the Administrator, the Ernst & Young audit, and NASA’s response.

<sup>8</sup>Ms. Gross was removed at the behest of Administrator O’Keefe on February 14, 2002. Contemporaneous articles made it clear Ms. Gross did not go voluntarily and not for cause [Edward Walsh, “Inspectors General Ousted at 2 Agencies: Moves Raise Concerns for Watchdogs’ Role,” Washington Post, April 3, 2002; p. A21; Paul C. Light, “The Last Word: Off With Their Heads,” Government Executive, May 2002, p. 66]. The importance of NASA’s audit lapse was highlighted by Mr. O’Keefe’s statement in his first appearance before the Senate Appropriation Committee Subcommittee on VA, HUD and Independent Agencies that, “The idea of . . . a disclaimed opinion from independent auditors because they couldn’t get the data is unacceptable. So in my judgment, this will not be a topic of discussion next year.” [Jefferson Morris, “O’Keefe to Congress,” Aerospace Daily, May 2, 2002; p. 1.] Ms. Gross described the connection between her dismissal and the disclaimer of opinion by PriceWaterhouseCoopers in a 2007 interview with staff.

<sup>9</sup>Competing claims about the PriceWaterhouse Coopers contract’s end came in allegations against former Inspector General Robert Cobb investigated by the Integrity Committee of the President’s Council on Integrity and Efficiency; in statements by Cobb when interviewed by committee staff in 2007, and in a Reuters article reporting that “. . . the audit firm opted out of the contract because it was unhappy with the relationship.” [Arindam Nag and Deborah Zabarenko, “NASA’s finances in disarray—auditor departs,” Reuters May 14, 2004 17:40 GMT].

<sup>10</sup> Financial Systems, Analyses and Oversight; Fund Balance with Treasury; Property; and Integrated Financial Management Program (IFMP) Systems Control Environment.

National Aeronautics and Space Administration  
**Office of Inspector General**  
Washington, DC 20546-0001



November 13, 2009

TO: Administrator  
Chief Financial Officer

FROM: Acting Inspector General

SUBJECT: Audit of the National Aeronautics and Space Administration's  
Fiscal Year 2009 Financial Statements (Report No. IG-10-002;  
Assignment No. A-09-006-00)

Under the Chief Financial Officers Act of 1990, NASA's financial statements are to be audited in accordance with generally accepted government auditing standards. The Office of Inspector General contracted with the independent public accounting firm Ernst & Young LLP (E&Y) to audit NASA's financial statements in accordance with the Government Accountability Office's "Government Auditing Standards" and the Office of Management and Budget's Bulletin No. 07-04, "Audit Requirements for Federal Financial Statements," as amended.

In the "Report of Independent Auditors" (Enclosure 1), E&Y disclaimed an opinion on NASA's financial statements for the fiscal years ended September 30, 2009 and 2008. While the Agency made significant progress in improving its financial processes and systems, the disclaimer resulted from continued weaknesses in internal controls over accounting for legacy property, plant, and equipment (PP&E).

The E&Y "Report on Internal Control" (Enclosure 2) identifies three significant deficiencies, with one considered a material weakness. A material weakness was found in NASA's controls for assuring that property, plant, and equipment and materials are presented fairly in the financial statements. The two significant deficiencies involve NASA's (1) process for estimating environmental liabilities and (2) compliance with the Federal Financial Management Improvement Act of 1996 (FFMIA). E&Y's report contains specific recommendations that are intended to help the Agency in remediating all three deficiencies during FY 2010.

The E&Y "Report on Compliance with Laws and Regulations" (Enclosure 3) identifies certain instances where NASA's financial management systems did not substantially comply with the requirements of FFMIA. Specific issues include information technology controls over the financial systems and the integration of the real property system with the Core Financial module.

In fulfilling our responsibilities under the Chief Financial Officers Act of 1990, we monitored the progress of the audit, reviewed E&Y's reports and related documentation, inquired of its representatives, and ensured that E&Y met contractual requirements. Our

review was not intended to enable us to express, and we do not express, an opinion on NASA's financial statements; conclusions about the effectiveness of internal controls over financial reporting; or compliance with certain laws and regulations, including, but not limited to, FFMA.

E&Y is responsible for each of the enclosed reports and the conclusions expressed therein. Our review, while still ongoing, disclosed no instances where E&Y did not comply, in all material respects, with the Government Accountability Office's "Government Auditing Standards."

We hope that you find the reports useful. Please contact me if you have questions.

signed

Thomas J. Howard

3 Enclosures



Ernst & Young LLP  
8484 Westpark Drive  
McLean, VA 22102

Tel: 703-747-1000  
www.ey.com

### Report of Independent Auditors

To the Administrator and the Acting Inspector General  
of the National Aeronautics and Space Administration

We were engaged to audit the accompanying consolidated balance sheets of the National Aeronautics and Space Administration (NASA) as of September 30, 2009 and 2008, and the related consolidated statements of net cost and changes in net position and the combined statements of budgetary resources for the fiscal years then ended. These financial statements are the responsibility of NASA's management.

During fiscal year 2009, NASA continued its focused efforts to resolve long-term issues identified in its financial management processes and systems. Although significant progress has been made, NASA management and our work continue to identify issues related to internal control in its property accounting, principally relating to assets capitalized in prior years. As a result of these limitations, we were unable to obtain sufficient evidential support for the amounts presented in the consolidated balance sheets as of September 30, 2009 and 2008, and the related consolidated statements of net cost and changes in net position and the combined statements of budgetary resources for the fiscal years then ended.

Because of the matters discussed in the preceding paragraph, the scope of our work was not sufficient to enable us to express, and we do not express, an opinion on the consolidated balance sheets as of September 30, 2009 and 2008, and the related consolidated statements of net cost, consolidated statements of changes in net position, and combined statements of budgetary resources for the fiscal years then ended.

The information presented in Management's Discussion and Analysis, required supplementary stewardship information, required supplementary information, and other accompanying information is not a required part of the basic financial statements but is supplementary information required by the Office of Management and Budget (OMB) Circular No. A-136. The other accompanying information has not been subjected to the auditing procedures applied in our audit of the basic financial statements and, accordingly, we express no opinion on it. We were unable to apply to the information certain procedures prescribed by professional standards within the time frames established by OMB because of the limitations on the scope of our audit of the financial statements discussed above.



Report of Independent Auditors  
Page 2

In accordance with *Government Auditing Standards* and OMB Bulletin No. 07-04, *Audit Requirements for Federal Financial Statements*, as amended, we have also issued our reports dated November 9, 2009, on our consideration of NASA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, and other matters. The purpose of those reports is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the internal control over financial reporting or on compliance. Those reports are an integral part of an audit performed in accordance with *Government Auditing Standards* and OMB Bulletin No. 07-04, as amended, and should be considered in assessing the results of our work.

*Ernst & Young LLP*

November 9, 2009



Ernst & Young LLP  
8484 Westpark Drive  
McLean, VA 22102

Tel: 703-747-1000  
www.ey.com

### Report on Internal Control

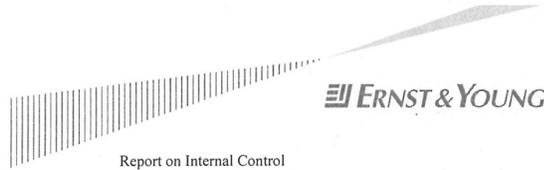
To the Administrator and the Acting Inspector General  
of the National Aeronautics and Space Administration

We were engaged to audit the financial statements of the National Aeronautics and Space Administration (NASA or the Agency) as of and for the year ended September 30, 2009, and have issued our report thereon dated November 9, 2009. The report states that because of the matters discussed therein, the scope of our work was not sufficient to enable us to express, and we do not express, an opinion on the consolidated balance sheet as of September 30, 2009, and the related consolidated statements of net cost and changes in net position, and the combined statement of budgetary resources for the fiscal year then ended.

In planning and performing our audit, we considered NASA's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of NASA's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of NASA's internal control over financial reporting. We limited our internal control testing to those controls necessary to achieve the objectives described in the Office of Management and Budget (OMB) Bulletin No. 07-04, as amended. We did not test all internal controls relevant to operating objectives as broadly defined by the Federal Managers' Financial Integrity Act of 1982 (FMFIA), such as those controls relevant to ensuring efficient operations.

Our consideration of internal control over financial reporting was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be significant deficiencies or material weaknesses and, therefore, there can be no assurance that all deficiencies, significant deficiencies, or material weaknesses have been identified. However, as discussed below, we identified certain deficiencies in internal control that we consider to be material weaknesses and other deficiencies that we consider to be significant deficiencies.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. We consider the deficiencies related to Enhancements Needed for Controls over Legacy Property, Plant and Equipment (PP&E) and Materials Contracts, to be a material weakness.



Report on Internal Control  
Page 2

A significant deficiency is a deficiency or a combination of deficiencies in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiencies related to Processes in Estimating NASA's Environmental Liability Continue to Require Enhancements and Financial Management Systems Not in Substantial Compliance with FFMIA to be significant deficiencies.

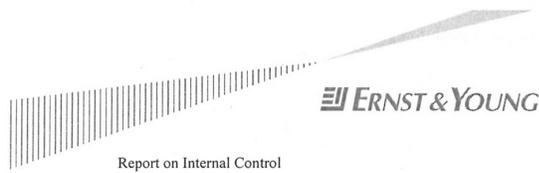
#### Material Weakness

##### **Enhancements Needed for Controls over Legacy PP&E and Materials Contracts, But SFFAS No. 35 Adoption May Aid In Resolving This Longstanding Issue (Modified Repeat Condition)**

Prior-year audit reviews of legacy PP&E identified serious weaknesses in the design of internal controls over the completeness and accuracy of legacy assets which prevented material misstatements from being detected and corrected in a timely manner by NASA. Certain legacy issues noted in prior-year audit reports continue to challenge the Agency, particularly in relation to the International Space Station (ISS) and Space Shuttles. During FY 2009, NASA management undertook a systematic process to address the valuation and completeness issues related to the ISS and Space Shuttle assets in anticipation of an FY 2009 release of the Federal Accounting Standards Advisory Board (FASAB) Statement of Federal Financial Accounting Standards (SFFAS) No. 35, *Estimating the Historical Cost of G-PP&E*, which was ultimately released in FY 2010. This standard is expected to substantially improve NASA's ability to account for these assets in accordance with generally accepted accounting principles in FY 2010. Note that Space Shuttle assets will be fully depreciated in FY 2010 as they will have reached the end of their useful lives and this timing coincides with the Space Shuttle Transition program. Adoption of changes in the internal control process associated with new contracts also holds promise in resolving these issues over time.

During the past several years, NASA has continued to revise and correct its records for legacy assets to address these legacy issues. These legacy issues fundamentally flowed from the lack of a robust control structure whereby NASA did not determine at the point of budget formulation, obligation recognition, contract development, accounts payable recognition or disbursement the amounts of property it expects to buy, has contracted for or has purchased. For example:

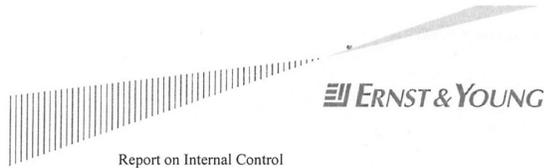
- In FY 2007, NASA recorded a \$12.7 billion adjustment to write off the net book value (NBV) of legacy assets (previously reported as "theme assets") which it believed were inappropriately capitalized since NASA's implementation of SFFAS No. 6, *Accounting for Property Plant and Equipment*, in FY 1998. NASA recorded this adjustment as a change in accounting principle based upon a technical release issued by the Accounting and Auditing Policy Committee of the FASAB. Prior to this cumulative effect adjustment, the NBV of NASA's PP&E was \$33.3 billion as of September 30, 2006.



Report on Internal Control  
Page 3

- In FY 2008, NASA recorded an adjustment of \$2.9 billion to expense costs previously capitalized as launch costs during the year as these costs were associated with taking foreign-owned components, rather than government-owned components, to the ISS. Prior to this year-end adjustment, the NBV of NASA's PP&E would have been \$24.5 billion as of September 30, 2008. The process to correct this item in FY 2008 was an indicator of the effectiveness of some of the financial management review processes which NASA had been developing, but also highlighted the need for the development of consistent controls regarding capitalization approaches, with appropriately vetted position papers and notification for pending areas of review to ensure that no significant year-end adjustments are needed. As noted below, launch cost calculations were revisited in FY 2009, and additional errors were noted.
- In FY 2009, NASA recorded a series of adjustments during the third and fourth quarters to correct for additional errors in the valuation of legacy assets related to the accounting for launch costs and integration and operational costs capitalized as part of the ISS. During NASA's analysis of the accounting for launch costs, management concluded that prior methodologies and amounts recorded were inaccurate since FY 1998, when the first component of the ISS was carried by the Space Shuttle. Management recorded a \$5.2 billion adjustment to write off the NBV of previously capitalized launch costs. Management revised its methodology during FY 2009 and, based upon its new estimates, it recorded an adjustment of \$84 million to capitalize the NBV of launch costs. In our initial reviews of management's revised methodology, developed in anticipation of the release of SFFAS No. 35, and estimation for capitalized launch costs, we noted that estimates were not fully supported by prior historical cost data, but management believes it has sufficient information to support reasonable estimates of such costs consistent with SFFAS No. 35 which will be effective in FY 2010.

Ongoing efforts by NASA management to develop a robust and rigorous review process that both validates and challenges the adequacy of estimation techniques used and the sufficiency of documentation supporting those conclusions will serve NASA management well in preparing for the audit of these estimates. This type of ongoing control activity is crucial for the Agency as it implements and sustains any estimation modeling for valuing components of its PP&E. For the integration and operational costs, NASA noted that it had been capitalizing Integration and Operations (I&O) costs associated with the ISS after the ISS was placed into service on September 30, 2001. According to NASA's inquiries of an ISS specialist, these costs included ground and flight support, maintenance and repairs and NASA's current financial management team concluded these costs should have been expensed as operation costs and not capitalized. Management recorded a \$1.4 billion adjustment to write off the NBV of previously capitalized I&O costs. Prior to these FY 2009 recorded adjustments, the NBV of NASA's PP&E would have been \$18.1 billion as of September 30, 2009.



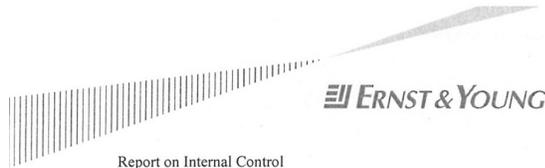
Report on Internal Control  
Page 4

Progress has been made in revising NASA's policies and NASA has gained a deeper understanding of the components of its capitalized assets. The adoption of SFFAS No. 35, *Estimating the Historical Cost of G-PP&E*, in FY 2010 provides a unique opportunity for NASA to address the legacy valuation issues which have impaired its ability to prepare auditable financial statements. As noted above, issues regarding whether broad components of PP&E should be recorded have arisen and been addressed over the last several years, in each case calling into question the reliability of prior processes and reported amounts. In connection with critically assessing management's reported amounts for PP&E in FY 2010 and subsequent years, as valuation issues are addressed utilizing the ongoing flexibility in the new FASAB guidance, the need to ensure that property records are complete and property items can be associated with estimates of their original acquisition costs consistent with the guidance in SFFAS No. 35 will loom larger. Subjecting such processes to rigorous self-assessment under management's internal control review process under OMB Circular A-123, *Management's Responsibility for Internal Control*, Appendix A - *Internal Control over Financial Reporting*, and robust assessments of the legacy property records for completeness and accuracy, perhaps in conjunction with ongoing monitoring activities, will serve NASA well in ensuring that reported amounts are complete and reliable. NASA is currently participating in work groups intended to assist agencies in exploring supportable approaches to developing valuation estimates and supporting such amounts to the extent needed to withstand audit processes, with an initial particular focus on contractor-held property. These deliberations may impact NASA and third-party assessments of whether the initial processes developed by NASA in an effort to address anticipated changes in the FASAB literature conform to the financial management community's implementation guidelines for SFFAS No. 35. Going forward, internal controls, which have been revised to account for acquisitions of property under contracts with effective dates after October 1, 2007, hold promise in addressing new acquisitions; however, the effectiveness of such controls cannot currently be assessed pending issuance of new contracts that would be impacted by this policy.

#### **Recommendation**

We recommend that NASA:

1. Continue to actively improve implementation of SFFAS No. 35. Areas for particular focus include: (1) appropriate approaches in critically assessing prior recorded amounts for legacy assets when the initial documentation to support recorded amounts is not available, and the extent to which such initial recorded amounts, perhaps in conjunction with budgetary or other collaborative information, can be viewed as reasonable estimates; and (2) the extent to which the entity must associate ongoing outlays with individual items of PP&E versus recording amounts based on contractor-provided estimates in bulk, particularly for legacy contracts which do not contain current NASA requirements intending to aid in identifying when PP&E is being acquired, and NASA's responsibilities to verify reported amounts.



Report on Internal Control  
Page 5

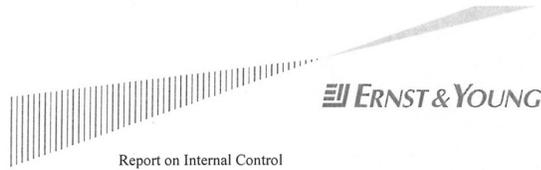
2. Develop an overarching key control activity that provides for a robust and rigorous review that both validates and challenges the adequacy of estimation techniques used and the sufficiency of documentation supporting those conclusions. This type of ongoing control activity is crucial for NASA as it implements and sustains any estimation modeling for valuing components of its PP&E. In addition, management should utilize existing monitoring activities and internal control assessments with a particular emphasis at the Center level in demonstrating that a comprehensive control process has been used to verify that detail property records are complete and reflect all PP&E, are reconciled to the recorded amounts in the general ledger, constitute NASA's best estimates consistent with SFFAS No. 35 of the historical costs of such items and that available information to aid in collaborating such amounts has been validated and appropriately considered.

#### Significant Deficiencies

##### **Processes in Estimating NASA's Environmental Liability Continue to Require Enhancement (Modified Repeat Condition)**

NASA's environmental liability is estimated at \$922 million as of September 30, 2009, including the estimated environmental cleanup cost associated with PP&E. We noted that the NASA Office of the Chief Financial Officer (OCFO) and the Environmental Management Division (EMD) invested resources to resolve our prior-year finding related to the internal controls for the unfunded environmental liability (UEL) estimation process. NASA developed an estimate in September 2009 of the anticipated environmental cleanup costs associated with PP&E, implementing our prior recommendation to develop such estimate in accordance with SFFAS No. 6, *Accounting for Property, Plant, and Equipment*. The joint review process, a key control NASA implemented to enhance its estimation processes, began to mature in FY 2009 and added additional consistency to the UEL estimation process. While NASA continues to make year-to-year progress, we noted weaknesses in NASA's ability to generate an auditable estimate on a timely basis of its UEL environmental cleanup costs and its environmental liabilities associated with PP&E. Specifically:

- While the estimates for environmental costs associated with PP&E were not provided with sufficient time to support the audit process, NASA has acknowledged a need to develop training and controls supporting the development of the estimates, and noted that the estimates were initially developed under severe time constraints and resource limitations. To the extent further such resources and adequate time are devoted to this process, changes in the estimates may emerge. This includes but is not limited to the reclassification of SFFAS No. 5 liabilities to SFFAS No. 6.



Report on Internal Control  
Page 6

- Approximately \$170 million, or 17% of the UEL estimate, is developed using the parametric models within NASA's Integrated Data Evaluation & Analysis Library (IDEAL) estimating software. NASA has not completed the design and implementation of its general and application controls for this model. Examples include: NASA-prepared security plans for IDEAL, in which it indicated that actions to mitigate security risks need to be resolved. NASA finalized its Configuration Management Plan and verification reports for five centers in October 2009. A preliminary assessment noted that the Configuration Management Plan did not address system audits or reporting. We noted that preliminary analysis of the verification reports revealed certain unit costs embedded in IDEAL indicate that such factors may be overstated by 100% and 300%, but NASA has not yet fully assessed how, if at all, to change the models for this finding, or completed an analysis of other such inputs. In addition, NASA has had large year-to-year changes in environmental estimates, due in part to varying interpretations of certain markup definitions in the software and, as discussed below, revisions to its process used in assessing the number of years for which sufficiently reliable cost estimates can be developed.
- During FY 2009, NASA revised its estimation process to reflect that in general UEL estimates for the first 30 years of a project's lifespan will be recorded as a liability in the NASA financial statements. While the guidance is under continued revision, it is our understanding that if a sufficiently reliable engineering estimate has been developed beyond this 30-year period, such estimate will be considered in developing the accrual. This revision in the estimation process resulted in an approximate 25% reduction in the accrual for the related estimates. The process to develop this revision in NASA's procedures called into question the extent of coordination between OCFO and EMD, with aspects of the policy as initially articulated not conforming to GAAP. In addition, no formalized process for calculating and aggregating the SFFAS No. 5 reasonably possible estimate has been established. In FY 2009, an initial reasonably possible estimate was intended in part to capture the portion of long-term UEL estimates which exceeded 30 years and by definition, under NASA's policy, was judged not to be sufficiently reliable to record in the accrual, calling into question the reliability of the information for disclosure purposes as well. The estimate was compiled and aggregated by EMD with little support from the individual project managers, and OCFO was not aware of the process.



Report on Internal Control  
Page 7

### **Recommendation**

As it relates to the estimation of environmental liabilities, we recommend that NASA:

1. Enhance and formalize the process it has developed to estimate environmental cleanup costs under SFFAS No. 6, *Accounting for Property, Plant, and Equipment*, including dedicating additional resources to ensure compliance with the requirements, implementing internal controls and developing training. To the extent a portion of the previously reported environmental liability estimates subsume closure costs more appropriately recognized under SFFAS No. 6, NASA financial reporting can be enhanced by reclassification of footnote disclosures for such costs.
2. Complete the development and implementation of general and application controls as they relate to IDEAL. The initial focus should be on demonstrating the accuracy of both the parametric model and aggregation output. An alternative recommendation is to use a commercially available software tool that already meets these conditions.
3. Recode IDEAL to simplify markup inputs. For example, at present, the prime contractor markup is comprised of two embedded components to capture markup for the prime contractor and subcontractor, which should be revised to only allow input for one NASA component at a time. Re-emphasize in the annual training provided to NASA's center EMD and OCFO personnel the explanations of these entries.
4. Implement preventative actions (i.e., controls) to address change management for accounting policy alterations to environmental liabilities and implement rigorous quality control efforts regarding associated footnote disclosures of reasonably possible and recorded amounts, including explicit discussion and conclusion on these items in the joint review process. Assign roles and responsibilities for implementation and for proper communication throughout the organization.

### **Financial Management Systems Not in Substantial Compliance with FFMIA (Modified Repeat Condition)**

NASA's financial management systems are not substantially compliant with the Federal Financial Management Improvement Act of 1996 (FFMIA). During FY 2009, as discussed above, NASA management took action to address its noncompliance with the FFMIA. Although these steps corrected certain weaknesses noted during the past five years, other weaknesses continue to exist. Specific weaknesses noted include the following:

- The real property system is not integrated with the Core Financial Module.



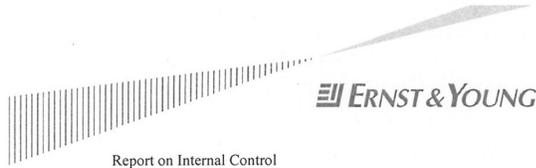
Report on Internal Control  
Page 8

- Issues related to access and change management were noted as a result of information technology (IT) audit procedures. The level of risk associated with these IT issues depends in part upon the extent to which financial-related compensating controls (such as reconciliations and data integrity reviews of output) are in place and operating effectively throughout the audit period. Certain of these controls designed to detect errors or inappropriate processing may also not be executed in a manner which can be expected to identify errors, which, while perhaps not material to the financial statements as a whole, may subject NASA to risks regarding safeguarding of assets. Although NASA has made progress in addressing and resolving prior-year IT findings, these IT-related issues, along with issues noted by Ernst & Young, the Government Accountability Office (GAO) and the NASA Office of Inspector General (OIG) in their reviews through the year, merit continued management focus.
- NASA was unable to meet certain requirements to ensure compliance with federal accounting standards, as discussed in various sections within this report.

#### ***Recommendation***

We recommend that NASA:

1. Move forward to integrate government-held real property transactions into the Asset Accounting Module of SAP in February 2010 and continue efforts to integrate recording of PP&E transactions contemporaneous with their occurrence,
2. Resolve issues identified during our IT procedures in our audit related to access and change management surrounding its financial management systems.



Report on Internal Control  
Page 9

**Other Matters**

**Summary of FY 2008 Material Weaknesses**

Issue Area FY 2008	Summary Control Issue FY 2008	FY 2009 Status
<b>Material Weaknesses</b>		
Financial Systems, Analyses, and Oversight	<ul style="list-style-type: none"> <li>• Continuous Monitoring Program</li> <li>• Financial Statement Preparation Process</li> <li>• Continued Efforts needed to Resolve Data Integrity Issues</li> <li>• Processes in estimating NASA's Environmental Liabilities continue to require enhancements.</li> <li>• Financial management systems not in substantial compliance with FFMIA.</li> </ul>	Significant improvements noted. Aspects related to UEL and FFMIA compliance reported as significant deficiencies.
Enhancements Needed for Controls over PP&E and Materials Contracts	<ul style="list-style-type: none"> <li>• Enhancements Needed for Controls over Legacy PP&amp;E and Materials Contracts</li> </ul>	Improvements noted pending SFFAS No. 35 adoption. Modified repeat condition.

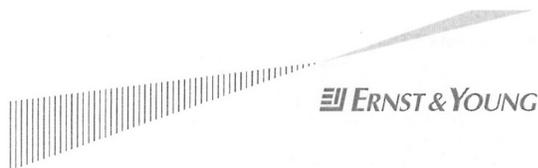
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We have reviewed our findings and recommendations with NASA management. Management generally concurs with our findings and recommendations and will provide a corrective action plan to address the findings identified in this report.

This report is intended solely for the information and use of the management and the OIG of NASA, OMB, GAO and Congress, and is not intended to be and should not be used by anyone other than these specified parties.

*Ernst & Young LLP*

November 9, 2009



Ernst & Young LLP  
8484 Westpark Drive  
McLean, VA 22102

Tel: 703-747-1000  
www.ey.com

### Report on Compliance with Laws and Regulations

To the Administrator and the Acting Inspector General  
of the National Aeronautics and Space Administration

We were engaged to audit the financial statements of the National Aeronautics and Space Administration (NASA) as of and for the year ended September 30, 2009, and have issued our report thereon dated November 9, 2009. The report states that because of the matters discussed therein, the scope of our work was not sufficient to enable us to express, and we do not express, an opinion on the consolidated balance sheet as of September 30, 2009, and the related consolidated statements of net cost and changes in net position, and the combined statement of budgetary resources for the fiscal year then ended.

The management of NASA is responsible for complying with laws and regulations applicable to NASA. We performed tests of its compliance with certain provisions of laws and regulations, noncompliance with which could have a direct and material effect on the determination of financial statement amounts, and certain other laws and regulations specified in Office of Management and Budget (OMB) Bulletin No. 07-04, *Audit Requirements for Federal Financial Statements*, as amended, including the requirements referred to in the Federal Financial Management Improvement Act of 1996 (FFMIA). We limited our tests of compliance to these provisions, and we did not test compliance with all laws and regulations applicable to NASA.

The results of our tests disclosed no instances of noncompliance with the laws and regulations discussed in the preceding paragraph exclusive of FFMIA that are required to be reported under *Government Auditing Standards* or OMB Bulletin No. 07-04, as amended.

Under FFMIA, we are required to report whether NASA's financial management systems substantially comply with federal financial management systems requirements, applicable federal accounting standards and the United States Standard General Ledger (SGL) at the transaction level. To meet this requirement, we performed tests of compliance with FFMIA Section 803(a) requirements. However, as noted above, we were unable to complete our audit. Based upon the results of the tests we were able to complete, we noted certain instances, described below, in which NASA's financial management systems did not substantially comply with certain federal system and federal accounting standard requirements:

- The real property system is not integrated with the Core Financial Module.



Report on Compliance with Laws and Regulations  
Page 2

- Issues related to access and change management were noted as a result of information technology (IT) audit procedures. The level of risk associated with these IT issues depends in part upon the extent to which financial-related compensating controls (such as reconciliations and data integrity reviews of output) are in place and operating effectively throughout the audit period. Certain of these controls designed to detect errors or inappropriate processing may also not be executed in a manner which can be expected to identify errors, which, while perhaps not material to the financial statements as a whole, may subject NASA to risks regarding safeguarding of assets. Although NASA has made progress in addressing and resolving prior-year IT findings, these IT-related issues, along with issues noted by Ernst & Young, the Government Accountability Office (GAO) and NASA Office of Inspector General (OIG) in their reviews through the year, merit continued management focus.
- NASA was unable to meet certain requirements to ensure compliance with federal accounting standards, as discussed in various sections of the Report on Internal Control.

Our Report on Internal Control includes information related to the financial management systems that were found not to comply with the requirements, relevant facts pertaining to the noncompliance and our recommendations related to the specific issues presented. It is our understanding that NASA's management generally agrees with the facts as presented and that relevant comments from NASA's management responsible for addressing the noncompliance are provided as an attachment to this report. We did not audit management's comments and, accordingly, we express no opinion on them.

Because we could not complete our audit, we were unable to determine whether there were other instances of noncompliance with laws and regulations that are required to be reported.

Providing an opinion on compliance with certain provisions of laws and regulations was not an objective of our audit and, accordingly, we do not express such an opinion.

This report is intended solely for the information and use of management and the OIG of NASA, OMB, GAO, and Congress, and is not intended to be and should not be used by anyone other than these specified parties.

*Ernst & Young LLP*

November 9, 2009

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



November 16, 2009

Reply to Attn of: Office of the Chief Financial Officer

TO: Inspector General  
FROM: Deputy Chief Financial Officer  
SUBJECT: Management's Response to Independent Auditors' Report for  
Fiscal Year 2009

I appreciate the efforts of the Office of Inspector General (OIG), and of the independent auditors under contract with the OIG, to audit the National Aeronautics and Space Administration's (NASA) FY 2009 financial statements. NASA's resolution of the prior year material weakness related to financial systems, analyses, and oversight is a direct result of commitment and focused effort from the entire Agency. This reflects NASA's continuing progress toward an improved audit opinion.

I understand that, due to weaknesses in NASA's internal control over legacy property and materials contracts, the independent auditors were unable to obtain sufficient evidential support for the amounts presented in the Agency's financial statements. Therefore, the auditors did not express an opinion on the consolidated balance sheets as of September 30, 2009 and September 30, 2008, and the related consolidated statements of net costs and changes in net position, and the combined statements of budgetary resources for the fiscal years then ended.

The Agency is committed to resolving the legacy property weaknesses, particularly through the guidance contained in the recently released Statement of Federal Financial Accounting Standard 35, Estimating the Historical Cost of General Property, Plant, and Equipment. We will also continue to address the noted deficiencies related to estimates for unfunded environmental liabilities and compliance with the Federal Financial Management Improvement Act.

A handwritten signature in cursive script that reads "Terry Bowie".

Terry Bowie

Chairman MILLER. Good afternoon. I am pleased to call to order this session, this joint hearing of the Subcommittee on Investigations and Oversight and the Subcommittee on Space and Aeronautics. Our purpose today is to examine the fiscal year 2009 audit of financial operations at the National Aeronautics and Space Administration.

NASA's independent auditors, the firm of Ernst & Young, decided not to render an opinion on whether the agency's financial documents fairly represented the financial condition of the agency in the last fiscal year. Such disclaimed opinions, they are called, had been very frequent at NASA in the last few years.

Seventeen years ago, the Subcommittee on Investigations and Oversight held a hearing to discuss financial management at NASA. Then, NASA had just been placed on the GAO, the Government Accountability Office's high-risk list for their lack of appropriate financial management system. The bottom line was that NASA could not tell you with confidence what their bottom line was. At that hearing, the Subcommittee learned that NASA apparently obligated to spend money without being sure it actually had the money it was spending, which is a violation of the Antideficiency Act.

It took about half as long to get to the moon as it has to clean up NASA's financial performance, but after three tries, hundreds of millions of dollars and the hard work of many NASA employees later, they have shown definite improvement. It is hard to take a lot of comfort from a disclaimed opinion. Finding comfort in that is like a student who was not promoted who took comfort in the fact they came much closer to passing the year before, but in all the circumstances, this really is improvement compared to where it has been.

The message is encouraging. The disclaimer of this audit is very different from those NASA received earlier in the decade. Today we are only discussing one material weakness, not four, and is one that is kind of understandable. The significant remaining problem is that NASA has been unable to meet accounting requirements for setting an asset value on the Shuttle and Space Station programs. While any material weakness is disappointing and a concern, we have come a long way from the days when NASA could not say how they were spending their money, what they were spending it on, what they spent, when they spent it. We are no longer talking about accountants fixing records by moving around a few billion dollars and treating that as rounding error to make the books work. We really have the best disclaimed opinion an agency could possibly hope for. So it really is the case that you almost passed your grade this year, and we are fairly confident that next year you will be promoted.

And we have more good news. NASA received guidance in October from the Federal Accounting Standards Advisory Board on how to value the Shuttle and the Space Station using estimates of value. That is a glimmer of hope that NASA can produce a valuation that really will pass muster, not be disclaimed by their accounting firm next year. It is my strong desire to see that happen this fiscal year so that if I see all of you again at this time next year, it will be at a holiday party, not at an oversight hearing. The

difficulties in trying to value assets like the Space Shuttle and the Space Station—which don’t really have a market value—there is nobody who wants to buy a used Space Shuttle or a used Space Station, which makes it very hard to use market prices for valuation. There really was a time when the claim that NASA’s books were just a mess is no longer really true and that we really do have reason to think that next year’s audit will be a clear, clean audit.

There are other matters that challenge NASA’s accounting operation. I am particularly concerned about the environmental liabilities that Ernst & Young spoke of—mentioned in their report. But I expect all the parties before us today can work together to sustain the progress we have seen in NASA’s financial management system.

[The prepared statement of Chairman Miller follows:]

PREPARED STATEMENT OF CHAIRMAN BRAD MILLER

Good afternoon. I am pleased to call to order this joint hearing of the Subcommittee on Investigations and Oversight and the Subcommittee on Space and Aeronautics. Our purpose is to examine the Fiscal Year 2009 audit of financial operations at the National Aeronautics and Space Administration.

NASA’s independent auditors, the firm of Ernst & Young, decided not to render an opinion on whether the agency’s financial documents fairly represented the financial condition of the agency in the last fiscal year. Such “disclaimed opinions” have been far too frequent in recent years at NASA.

Seventeen years ago, the Subcommittee on Investigations and Oversight held a hearing to discuss financial management at NASA. In those days, NASA had just been placed on the Government Accountability Office’s “high-risk” list for their lack of an appropriate financial management system. The bottom line was that NASA could not tell you with confidence what their bottom line was. At that hearing, the Subcommittee learned that NASA had apparently obligated to spend money without being sure it actually had the funds—which constitutes a violation of the Anti-Deficiency Act.

It only took about half as long to get to the moon as it has taken to clean up NASA’s financial performance, but three tries, hundreds of millions of dollars and the hard work of many NASA employees later they have shown definite improvement.

Our message today is encouraging—the disclaimer of this audit is very different from those NASA received earlier this decade. Today we are only discussing one material weakness, not four. The significant remaining problem is that NASA has been unable to meet accounting requirements for setting an asset value on the Shuttle and Space Station programs. While any material weakness is disappointing, we have come a long way from the days when NASA could not say with confidence who had spent money on what, when. We are no longer talking about NASA accountants fixing records by arbitrarily making adjustments to accounts on the order of billions of dollars. In short, this is the best disclaimed opinion an agency could hope for.

And we have more good news: NASA received guidance in October from the Federal Accounting Standards Advisory Board on how to value the Shuttle and Station using estimates of value. This provides a glimmer of hope that NASA can produce a valuation that will pass muster with their accounting firm. It is my strong desire to see that happen, this fiscal year, so that if I see you the three of you this time next year, it will be at a Christmas party not an oversight hearing. The difficulties in trying to value assets such as the Space Shuttle and Space Station, that have no real market value, leads people to believe NASA can’t keep its books. There was a time when that claim would have been true, but it is not true today and I hope that the auditing done next year will make that clear.

There are other matters that challenge NASA’s accounting operation—I am particularly concerned about the environmental liabilities issues that Ernst and Young mention. However, I expect all the parties before us today can work together to sustain the progress we have seen in NASA’s financial management system.

At this time, I will thank the witnesses for participating in the hearing and now yield to Chairwoman Giffords for her opening statement.

Chairman MILLER. And now at this time, I think we agreed to go Chair, Chair, Ranking Member, Ranking Member. I am sorry, Chair, Ranking Member, Chair, Ranking Member.

I now recognize Dr. Broun, the Ranking Member of the Investigations and Oversight Subcommittee.

Mr. BROUN. Thank you, Mr. Chairman. Let me welcome our witnesses here today and congratulate two of you on your new appointments. Mr. Martin and Dr. Robinson, I look forward to working with you in the future, and I do congratulate you on your new appointments. And both of you have your work cut out for you in the future. I would be remiss if I did not mention the tremendous progress that your predecessors have made. NASA's financial management was in tremendous disarray for many years. The agency is still not out of the woods yet, but the steps taken by your predecessors should obviously be noted and accolades to them.

I hope that our witnesses today will continue that trend, and I look forward to your progress. Problems still remain, however. As Mr. Murrin will detail in his testimony, NASA once again has received a disclaimed opinion, meaning that the independent auditor could not express an opinion on the status of NASA's balance sheets. This is certainly not the first time this has happened. Hopefully this may be the last, and I sure hope so just to reiterate what Chairman Miller said. Our Committee, GAO and NASA IG have all followed this issue closely for many years. GAO and the NASA IG have issued a litany of reports over the last two decades, and this Committee has had several hearings to address the topic.

I am pleased to hear that NASA seems to have been brought in, quote unquote, to a single-standards accounting system rather than the multiple fiefdoms that were present in the past. NASA still faces the daunting task of evaluating property, plant and equipment, most notable, the Space Shuttle and International Space Station. While this problem may never be fixed, it may work itself over time as the Shuttle is planned to retire next year, and the Space Station operations will eventually end as well. Until then, I hope that solutions can be found that both respect appropriate accounting standard as well as real-world realities.

I look forward to monitoring your progress and ensuring that NASA handles scarce taxpayer resources in a transparent and accountable manner. Thank you, Mr. Chairman, and I yield back the balance of my time.

[The prepared statement of Mr. Broun follows:]

PREPARED STATEMENT OF REPRESENTATIVE PAUL C. BROUN

Thank you Mr. Chairman.

Let me welcome our witnesses here today, and congratulate two of them on their new appointments. Mr. Martin and Dr. Robinson both have their work cut out for them, and I look forward to working with both of them in the future. I'd be remiss if I did not mention the tremendous progress their predecessors made. NASA's financial management was in disarray for many years. The agency is still not out of the woods, but the steps taken by their predecessors should be noted. I hope that our witnesses today will continue this trend, and I look forward to following their progress.

Problems still remain, however. As Mr. Murrin will detail in his testimony, NASA once again received a disclaimed opinion—meaning that the independent auditor could not express an opinion on the status of NASA's balance sheets. This is certainly not the first time this has happened. Our Committee, GAO, and NASA IG have all followed this issue closely for many years. GAO and the NASA IG have

issued a litany of reports over the last two decades and this Committee has held several hearings to address the topic.

I'm pleased to hear that NASA seems to have "bought in" to a single standardized accounting system, rather than the multiple fiefdoms of the past. NASA still faces the daunting task of valuing Property Plant & Equipment (PP&E)—most notable the Space Shuttle and the International Space Station (ISS). While this problem may never be fixed, it may work itself out over time as the Shuttle is planned to retire next year, and ISS operations will eventually end as well. Until then, I hope that solutions can be found that both respect appropriate accounting standards, as well as real world realities.

I look forward to monitoring your progress and ensuring that NASA handles scarce taxpayer resources in a transparent and accountable manner.

Thank you Mr. Chairman, I yield back the balance of my time.

Chairman MILLER. Thank you, Dr. Broun. I now recognize the Chairwoman of the Subcommittee on Space and Aeronautics, who I am sure hopes the financial management at NASA will achieve the standards set by the astronauts, the Honorable Gabrielle Giffords for her opening statement.

Ms. GIFFORDS. Thank you, Mr. Miller, Mr. Chairman. I would like to as well extend a welcome to our witnesses today.

I am going to keep my comments as short as possible. I, along with other members here of Congress, are very strong supporters of NASA. We believe that NASA is truly the crown jewel of America's R&D efforts. NASA can inspire, can educate, can improve our society throughout a variety of its activities. What we ask NASA to do is very, very difficult. So want to be careful to make sure that you have the resources that you need. But at the same time, there is a very strong responsibility to the American taxpayer to make sure that the funds being spent by NASA or any other agency is being well spent. We take that responsibility seriously. I do as the Chairwoman. I know my colleagues do as well, and that is why the Chairman and I have called today's hearing.

As many of you already know, NASA recently received the results of its annual independent financial audit. It once again received a disclaimed opinion. Of course, that is not what any of us want to see from NASA. At the same time, it was not totally a surprise, since NASA had been receiving disclaimed opinions for most of this decade. Now, that is the bad news, and one of the reasons we are holding today's hearing.

We need to know why NASA received a disclaimed opinion, how NASA can clean up that opinion, and what NASA intends to do to ensure that we are not going to be here next year to get the same decision. However, I also wanted to hold this hearing because it is clear that there is a lot of very good news coming out of NASA. The financial management has definitely improved.

It is clear from the auditor's report and the NASA IG's findings have found that NASA has made truly significant improvements over its financial management systems and practices over the last many year, and in short, after almost a decade of serious shortcomings as mentioned by my colleague in NASA's approach to financial management, now you are really coming very close to closing the books on those problems. So congratulations. It is good news.

Before I close, I would also just like to say that solutions like this to problems in our government don't happen overnight. They happen because of the hard work of some very dedicated government

employees. The work that was done under the leadership of the former CFO, Honorable Ronald Spoehel, is something that is not widely known and recognized. He persevered in a thankless but ultimately very significant task, and he should take great pride in what he was able to accomplish.

Again, we often overlook the work that has been done by so many who work for our government, and Mr. Spoehel and his team were tremendous individuals and are owed a debt of gratitude.

Dr. Robinson, I know that you will continue to build on the progress that has been made to date. And as you assume the duties of CFO, I know that you will do so with great effectiveness and efficiency.

With that, again I would like to welcome our witnesses, and we look forward to your testimony. Thank you.

[The prepared statement of Chairwoman Giffords follows:]

PREPARED STATEMENT OF CHAIRWOMAN GABRIELLE GIFFORDS

Good afternoon. I want to join Chairman Miller in welcoming our witnesses to this afternoon's hearing. In the interest of getting to our witnesses as soon as possible, I will be brief in my opening remarks. I am a strong supporter of NASA, because I believe that it is one of the "crown jewels" of the nation's R&D enterprise. Moreover, it can inspire, educate, and improve our society through its activities. I want to ensure that NASA receives the resources that it will need to carry out the many tasks that we have given it. At the same time, I feel the equal responsibility of ensuring that NASA is a good steward of those resources—resources which ultimately come from the American taxpayers. I take that responsibility seriously, as I know my colleagues do. That is why Chairman Miller and I called today's hearing.

As many of you already know, NASA recently received the results of its annual independent financial audit. It once again received a "disclaimed" opinion. That is not what we want to see from NASA. At the same time, it was not totally a surprise, since NASA has been receiving disclaimed opinions for most of this decade. That's the bad news, and one of the reasons we are holding today's hearing.

We need to know *why* NASA got a disclaimed opinion, *how* NASA can get a clean opinion, and *what* NASA intends to do to ensure that it won't get another disclaimer next year. However, I also wanted to hold this hearing because it is clear that there is a lot of good news to report on the financial management front at NASA.

It is clear from the auditor's report and the NASA IG's findings that NASA has made truly significant improvements in its financial management systems and practices. In short, after almost a decade of serious shortcomings in its approach to financial management, NASA is now very close to closing the books on those problems. That is very good news, and I hope that it will not get lost sight of today as we discuss what remains to be done.

Before I close, I would note that the dramatic improvement we have seen in NASA's financial management didn't just happen. It was the result of a lot of hard work by a dedicated team under the leadership of the former CFO, the Honorable Ronald Spoehel. He persevered in a thankless but ultimately very significant task, and he should take great pride in what he was able to accomplish. We often overlook the important role that individuals can play in making our government work better. Mr. Spoehel and his team were such individuals, and we owe them our gratitude. Dr. Robinson, I hope that you will build on the progress made to date as you assume the duties of CFO, and I am confident that you will do so effectively and efficiently.

With that, I again want to welcome our witnesses and I look forward to your testimony.

Chairman MILLER. Thank you, Ms. Giffords. The Chair now recognizes Mr. Olson from Texas, the Ranking Member of the Space and Aeronautics Subcommittee for his opening statement, the last of the four.

Mr. OLSON. I would like to thank the chairs, Chairman Miller, Chairwoman Giffords, and Chairman Broun, for hosting this hearing today. Thank you to the witnesses for being here, taking the

time to be here and may I offer a welcome particularly to Mr. Martin and Dr. Robinson. You have extremely critical positions at NASA, and I wish you the best in your new posts. I hope you know that you have folks on these Committees and in this Congress who are willing to stand up to make sure that the agency is on the right track to achieve the—missions it has and will undertake.

Along those lines, I would like to say in regard to this hearing today that the diligent efforts by NASA over the last several years to get their financial house in order are bearing fruit, and the agency should be commended for the hard work it has done to get us to where we are today.

I would like to especially recognize the work of Ron Spoehel and commend him for his services at NASA as a CFO at this time as well.

I am a strong proponent of giving NASA the resources it needs to achieve its goals. While the agency is in desperate need of funds, we cannot and frankly should not advocate for increased taxpayer money unless we are confident that those funds are being spent efficiently, wisely and with accountability. An agency that is not adequately accountable for taxpayer resources should not be awarded with increased funding. That is why we are here, talking about this important initiative in any circumstance but particularly at this time in the agency's history.

Thank you for what you have done and what we will do together on behalf of the Nation's space flight program.

I yield back my time.

[The prepared statement of Mr. Olson follows:]

PREPARED STATEMENT OF REPRESENTATIVE PETE OLSON

I'd like to thank the Chairs, Reps. Giffords and Miller, and Ranking Member Broun for holding this important hearing today. Thank you to the witnesses for taking the time to be here, and may I offer a welcome particularly to Mr. Martin and Ms. Robinson. You have extremely critical positions at NASA and I wish you the best in your new posts. I hope you know you have folks on this committee and in this Congress who stand willing to help make sure the agency is on the right track to achieve the worthy missions it has and will undertake.

Along those lines, I'd like to say in regard to this hearing today that the efforts performed to get NASA's financial house in order are seeing fruit, and the team should be commended for the hard work it has done to get us where we are today. I'd like to recognize the work of Ron Spoehel and thank him for his service at NASA as CFO at this time as well.

I am a strong proponent of giving NASA the resources it needs to achieve its goals. While the agency is in desperate need for funds, we cannot, and frankly should not, advocate for increased taxpayer money if those already entrusted to it aren't spent wisely, efficiently, and correctly. An agency that is not adequately accountable of government resources should not be entrusted with more of them. That is why what we are here talking about it important under any circumstance, but particularly at this time in the Agency's history.

Thank you for what you have done, and what we will do together on behalf of our nation's space program.

Chairman MILLER. Thank you, Mr. Olson. I ask unanimous consent for all additional opening statements submitted by any member of either Subcommittee be included in the record. Without objection, so ordered.

It is now my pleasure to introduce our witnesses. Members will be interested to know that Mr. Martin and Dr. Robinson are making their first appearance before our Committee or any Sub-

committee of our Committee. In between them they have 1 month in their new positions.

Mr. Paul Martin is the new Inspector General of NASA. I am very pleased to say new Inspector General of NASA. He was confirmed by the Senate as a NASA Inspector General on November 20 and previously served as a Deputy Inspector General at the Department of Justice. For 6 years from 2001 to 2003, he was a counselor to the Inspector General and previously was the Special Counsel to the Inspector General from 1998 to 2001. Earlier, he spent 13 years at the U.S. Sentencing Commission and began his career as a reporter with the *Greenville News* in Greenville, South Carolina.

Accompanying Mr. Martin is Mr. Tom Howard who has served as Deputy Inspector General at NASA since 2002. He previously worked at the Department of Transportation in the Government Accountability Office.

Mr. Dan Murrin is partner in the Assurance and Advisory Business Services division at Ernst & Young. Mr. Murrin has been the primary Ernst & Young partner managing the NASA audit team since the company won the independent audit contract in 2004. He served as a Professional Accounting Fellow for 2 years for the Government Accountability Office during passage and initial start-up of the Chief Financial Officers Act of 1990. He then resumed his career at Ernst & Young in October 1992. He has 30 years' total experience relating to public sector auditing issues.

And finally, Dr. Elizabeth Robinson is NASA's chief financial officer and was confirmed by the Senate on November 9 of this year. In her previous position, she was Assistant Deputy for Budget at the Office of Management and Budget. She has also held the post of Deputy Director at the Congressional Budget Office, and early in her career, Dr. Robinson served here on the staff of the Science and Technology Committee evaluating the Department of Energy programs and policies. Dr. Robinson, I would have mentioned that you were a former staff member of this Committee, even if I had written these introductions myself.

As our witnesses should know, you each have 5 minutes for your spoken testimony. Your written testimony will be included in the record for the hearing. When you all have completed your spoken testimony, we will begin with questions. Each member will have 5 minutes to question the panel. It is the practice of this Subcommittee, our Subcommittee, Investigations and Oversight, to receive testimony under oath. Do any of you have any objection to taking an oath? The record should reflect that all the witnesses nodded in the affirmative that they have no objection.

You also have the right to be represented by counsel. Do any of you have counsel here with you? The witnesses all again nodded in the affirmative.

Please stand and raise your right hand. Do you swear to tell the truth and nothing but the truth? All the witnesses have now taken the oath. And now I assume that being advised of all of your rights you feel relaxed and prepared to talk to us. Let the record show that all these witnesses have taken the oath, and we will start with the first witness, Inspector General Martin. Mr. Martin, you are recognized for 5 minutes.

**STATEMENT OF HON. PAUL K. MARTIN, INSPECTOR GENERAL,  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, AC-  
COMPANIED BY TOM HOWARD, DEPUTY INSPECTOR GEN-  
ERAL, NATIONAL AERONAUTICS AND SPACE ADMINISTRA-  
TION**

Mr. MARTIN. Thank you, Chairman Miller, Chairwoman Giffords and Ranking Members of the Committee. At the outset, I would like to thank you for your warm words of welcome. I can think of no better way to end my fourth day on the job than up here in front of the Committee.

Thank you for the opportunity to allow us to discuss the fiscal year 2009 audit of NASA's financial statements. With me today is Tom Howard, the Deputy Inspector General at NASA and the key supervisor at the OIG who has worked this issue over the last few years.

As requested, our written statement that we submitted to the Committees addresses three main issues: first, the Office of Inspector General's views of the issues identified by Ernst & Young, the independent public accounting firm that conducted the audit under contract with the OIG; second, NASA's progress in remediating its financial management problems; and third, Ernst & Young's recommendations to address ongoing issues.

By way of background, for most of the past decade, the OIG has identified NASA's need to improve its financial management as one of the agency's most serious performance and management challenges; and to its credit, over the years NASA has focused considerable effort on resolving longstanding weaknesses in its financial management processes and systems. While the agency has made significant improvements, several key challenges remain as evidenced by the fact that Ernst & Young disclaimed an opinion on NASA's financial statements again in fiscal year 2009.

As was discussed, this disclaimer is based on the auditor's inability to obtain sufficient evidentiary support for the amounts presented in the agency's financial statements. The primary reason for this was NASA's continued inability to accurately value its legacy assets, specifically the Space Shuttle and the International Space Station. Although we recognize that NASA has made significant progress in improving its financial processes and system, the 2009 audit report identified three significant deficiencies in internal controls, one of which is considered a material weakness. Specifically, Ernst & Young reported a material weakness in NASA's controls for ensuring that the value of legacy property, plant and equipment presented in the financial statement is fairly stated. This means there was a reasonable possibility that internal controls over NASA's legacy assets were insufficient to prevent a material misstatement in the agency's financial statements. The other two internal control deficiencies cited by Ernst & Young involve NASA's process for estimating its environmental liabilities and its compliance with the Federal Financial Management Improvement Act of 1996.

To help NASA leadership correct these weaknesses, the audit contains a series of recommendations, including that NASA focus on improving its implementation of recent guidance permitting the use of estimates in establishing the value of legacy assets.

Through its own initiatives and through discussions with the OIG and Ernst & Young, NASA's Office of the Chief Financial Officer is pursuing a series of actions to improve the agency's financial management and address existing weaknesses in internal controls. Most notably, the agency has revised and improved its continuous monitoring program which helps NASA managers assess on an ongoing basis its financial management process and internal controls. This program also helps ensure that balances and activities reported in the agency's financial statements are accurate and complete.

As we look to the 2010 fiscal year, NASA is also working to address the valuation of its legacy assets, improve its process for estimating environmental liabilities and ensure compliance with FFMIA.

In closing, we believe that NASA, through effective implementation of the recommendations contained in the 2009 audit report, together with a continued focus on its ongoing monitoring and remediation efforts, should be able to correct the existing weaknesses in its financial management processes and systems during fiscal year 2010.

This concludes our oral statement. We would be pleased to answer your questions.

[The prepared statement of Mr. Martin follows:]

PREPARED STATEMENT OF HON. PAUL K. MARTIN

Chairman Miller and Chairwoman Giffords, Ranking Members, and Members of the Subcommittees:

Thank you for the opportunity to discuss the fiscal year (FY) 2009 audit of the National Aeronautics and Space Administration's (NASA) financial statements. The independent public accounting firm Ernst & Young LLP (E&Y) conducted the audit under a contract with the Office of Inspector General (OIG).

As requested, this statement describes the OIG's views of the issues identified by E&Y, NASA's progress in remediating its financial management problems, and E&Y's recommendations to address continuing issues.

The OIG has identified the need to improve financial management at NASA as one of the most serious performance and management challenges facing Agency leadership for most of this decade. Over the years, NASA implemented a variety of corrective actions to address longstanding weaknesses in its financial management processes and systems. While the Agency has made significant improvements, several challenges remain to be addressed.

For example, in its most recent report, E&Y disclaimed an opinion on NASA's financial statements for FY 2009. The disclaimer indicates that E&Y was unable to obtain sufficient evidentiary support for the amounts presented in the Agency's financial statements and resulted primarily because of continued weaknesses in NASA's internal controls over accounting for legacy assets—specifically, the Space Shuttle and International Space Station (ISS). Although the auditor's report recognizes that the Agency has made significant progress in improving its financial processes and systems, the report identified three significant deficiencies<sup>1</sup> in internal controls with one considered a material weakness.

Specifically, E&Y reported a material weakness in NASA's controls for assuring that the value of legacy property, plant, and equipment (PP&E) and materials presented in the financial statements is fairly stated. E&Y's identification of internal controls over legacy assets as a material weakness means there was a reasonable possibility that the controls were not sufficient to prevent a material misstatement in the financial statements. The other two internal control deficiencies cited by E&Y

<sup>1</sup>During the reporting period of the FY 2009 audit, the American Institute of Certified Public Accountants standards defined a "significant deficiency" as a deficiency or a combination of deficiencies in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

involved NASA's processes for estimating environmental liabilities and its compliance with the Federal Financial Management Improvement Act of 1996 (FFMIA).

E&Y's report contains specific recommendations to assist the Agency in remediating existing weaknesses during FY 2010. For example, E&Y identified areas for particular focus in improving the Agency's implementation of recent guidance permitting the use of estimates in establishing the value of legacy assets.

Through its own initiatives and as a result of discussions with our office and E&Y, NASA's Office of the Chief Financial Officer is pursuing actions intended to improve financial management and address specific weaknesses in internal controls. Most notably, the Agency made improvements to and revised its Continuous Monitoring Program, which assesses financial management processes and internal controls for compliance with generally accepted accounting principles (GAAP) and ensures that balances and activities reported in the financial statements are accurate and complete. The Agency is also conducting specific remediation efforts to address the valuation of legacy assets, improve the process for estimating environmental liabilities, and ensure compliance with FFMIA.

Through effective implementation of E&Y's most recent recommendations and a continued focus on its ongoing monitoring and remediation efforts, the Agency should be able to correct existing weaknesses in financial management during FY 2010.

### **NASA's Weaknesses in Financial Management Are Longstanding**

In FY 2002, NASA initiated a 7-year, Agency-wide effort to provide a single, integrated suite of financial, project, contract, and human capital tools. This new integrated financial management system was envisioned to help NASA manage its programs and prepare financial information on a timely basis.

During FY 2003, NASA implemented the Core Financial module as part of its single, integrated financial management system. The Core Financial module replaced 10 disparate Center-level accounting systems and the NASA Headquarters accounting system, along with approximately 120 ancillary subsystems in operation for the past 2 decades. The conversion of legacy accounting data into the Core Financial module posed a greater-than-expected challenge for the Agency because of the volume of data and the cumbersome techniques utilized to convert it from the legacy systems to the new system. The conversion had a significant impact on the quality and timeliness of the Agency's financial information and necessitated complex, time-consuming data cleanup efforts that were not well defined or easily accomplished.

In January 2004, the independent auditor at the time—PricewaterhouseCoopers—determined that it could not render an opinion on NASA's financial statements for FY 2003 because of the data integrity issues resulting from the conversion. During its audit testing and review of the year-end financial statements, the auditor noted significant adjustments and discrepancies that the Agency could not explain. For example, the auditor found that in preparing the financial statements, NASA posted numerous manual adjustments outside of the Core Financial module.

In its review of these adjustments and discrepancies, PricewaterhouseCoopers noted that the value of 87 adjustments was approximately \$582 billion. Of the \$582 billion in adjustments, nearly \$565 billion related to data conversion errors and nearly \$2 billion related to net adjustments to the Agency's Fund Balance with Treasury account. NASA could not provide documentary evidence to support the purpose and the validity of the adjustments.

Also in its report on the FY 2003 financial statement audit, PricewaterhouseCoopers cited five reportable conditions,<sup>2</sup> including four that it considered material weaknesses:<sup>3</sup>

- Property, Plant, and Equipment (Material Weakness)
- Financial Statement Preparation Process (Material Weakness)

<sup>2</sup>During the reporting period of the FY 2003 audit, the American Institute of Certified Public Accountants (AICPA) standards defined "reportable condition" as significant deficiencies in the design or operation of internal control that in the auditor's judgment could adversely affect the entity's ability to record, process, summarize, and report financial data consistent with the assertions of management in the financial statements.

<sup>3</sup>During the reporting period of the FY 2003 audit, AICPA standards defined "material weakness" as a reportable condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements caused by error or fraud in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions.

- Audit Trail and Documentation to Support the Financial Statements (Material Weakness)
- Fund Balance with Treasury (Material Weakness)
- General Information Technology (IT) Controls (Reportable Condition)

From FY 2003 through FY 2009, unresolved data integrity problems, material weaknesses in internal controls over assets, and ineffective report development processes continued to impair the Agency's ability to prepare financial statements that were accurate and complete.

### NASA Has Made Significant Progress in Remediating Financial Management Weaknesses

In the years that followed the conversion to the Core Financial module, NASA focused significant efforts on identifying and resolving long-standing systemic and financial management issues. As part of these efforts, NASA reorganized its financial management structure, reorganized its business processes to align with the financial management system, upgraded its system, developed new guidance, and provided training to its personnel to address these issues.

As shown in the following table, NASA has made significant progress in remediating the majority of its material weaknesses in internal controls.

National Aeronautics and Space Administration Office of Inspector General Analysis of NASA's Financial Statement Audit Opinion and Reported Findings								
		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Independent Auditor		PwC	E&Y	E&Y	E&Y	E&Y	E&Y	E&Y
Audit Opinion		Disclaimer						
1	General Controls Environment	RC	MW					
2	Property, Plant, and Equipment	MW						
3	Financial Statement Preparation Process and Oversight	MW	MW	MW	MW	MW	MW	
4	Fund Balance with Treasury	MW	MW	MW				
5	Audit Trail and Documentation to Support Financial Statements	MW						
6	Environmental Liability Estimation		RC	RC				SD
7	Financial Management Systems Not in Substantial Compliance with the Federal Financial Management Improvement Act of 1996 (FFMIA)							SD

PwC, PricewaterhouseCoopers, LLP; E&Y, Ernst & Young, LLP; RC, Reportable Condition; SD, Significant Deficiency; MW, Material Weakness

#### General IT Controls

In FY 2005, NASA completed corrective actions to substantially remediate weaknesses noted in the control environment of the integrated financial management system. NASA improved upon its entity-wide security program controls, its application software development and program change controls, and its system software controls that limit and monitor access to powerful programs and sensitive files that control computer hardware and secure applications supported by the system.

#### Fund Balance with Treasury

In FY 2006, NASA substantially remediated its material weakness concerning Fund Balance with Treasury reconciliations. An agency's Fund Balance with Treasury represents monies an agency can spend for authorized transactions; these monies are based on budget spending authorizations and are made available through Treasury warrants. In the FY 2003 audit report, PricewaterhouseCoopers noted that to correct cash imbalances between NASA and Treasury, NASA made adjustments of nearly \$2 billion, net, to its Fund Balance with Treasury account to agree with Treasury's reported balance on September 30, 2003, but could not provide sufficient documentary evidence to explain the adjustments.

Over the next few years, NASA expended significant effort in analyzing discrepancies related to the conversion and refining its procedures to ensure it was performing reconciliations properly to allow differences to be resolved in a timely manner. E&Y's review of the FY 2006 reconciliations identified progress in the preparation and more timely identification and resolution of differences arising from cur-

rent-period transactions, thus eliminating the issue as a stand-alone material weakness for FY 2006 reporting.

*Financial Systems, Analyses, and Oversight*

The material weakness in financial systems, analyses, and oversight identified by E&Y in FY 2004 encompassed the underlying findings noted by PricewaterhouseCoopers in FY 2003 relating to NASA's financial statement preparation process and its audit trail supporting the financial statements. In FY 2008, NASA developed the Comprehensive Compliance Strategy to help focus the Agency on ensuring compliance with GAAP and other financial reporting requirements. NASA also further developed its Continuous Monitoring Program (CMP) by requiring the Centers to perform a set of control activities to assess internal controls and compliance with GAAP to ensure that the evidence to support the balances and activity reported in NASA's financial statements are accurate and complete.

Throughout FY 2009, NASA continued to improve its internal controls over financial reporting by implementing and improving CMP. Ultimately, CMP operated as designed by identifying exceptions through the execution of the control activities and then tracking the resolution of the exceptions in a timely manner. Successful implementation of the CMP was the major contributing factor in resolving the long-standing material weakness over financial systems, analyses, and oversight.

*Property, Plant, and Equipment*

To help address the material weakness in property, plant, and equipment (PP&E), NASA implemented new PP&E capitalization policy and procedures for assets procured on or after October 1, 2007. Successful implementation of the policy and procedures were intended to ensure that the value and completeness of capitalized assets procured after that date, whether Government-held or contractor-held, will be accurate.

For contracts with effective dates on or after October 1, 2007, contractors are required to report the cost of each capitalized asset as a separate item on required contractor cost reports. NASA also designed a process to reconcile the monthly contractor cost reports and the capitalized PP&E amounts recorded in NASA's Contractor-Held Asset Tracking System and the Core Financial module. Although E&Y recognized that NASA's new policy and procedures represent significant progress in improving its internal controls over PP&E, the independent public accountant could not test the effectiveness of the controls because the Agency did not have any new contracts that fell into this category during FY 2008 or FY 2009.

*E&Y's Recommendations Can Help NASA Remediate Remaining Weaknesses in FY 2010*

As noted, NASA has made significant progress in developing policies, procedures, and controls to improve its financial processes and systems; nevertheless, challenges remain. Specifically, during FY 2009 both NASA and E&Y continued to identify deficiencies in the Agency's system of internal control that impair its ability to timely report accurate and complete financial information. However, E&Y's Report on Internal Control contains specific recommendations to assist the Agency in remediating the three identified deficiencies during FY 2010.

Through its own initiatives and as a result of discussions with our office and E&Y, NASA's Office of the Chief Financial Officer is pursuing actions intended to improve financial management and address specific weaknesses in internal controls. As noted, the Agency's Continuous Monitoring Program was the major contributing factor in resolving the long-standing material weakness over financial systems, analyses, and oversight. Moving forward, continuing specific remediation efforts need to address the valuation of legacy assets, improve the process for estimating environmental liabilities, and ensure FFMIA compliance.

*Legacy PP&E*

The weakness in controls over PP&E discussed in E&Y's FY 2009 report focuses primarily on controls over legacy assets that flow from contracts executed prior to October 1, 2007. For several years, audits of these legacy assets have identified serious weaknesses in internal controls over the completeness and accuracy of the value of the assets.

In early FY 2010, the Federal Accounting Standards Advisory Board issued the Statement of Federal Financial Accounting Standards (SFFAS) No. 35, *Estimating the Historical Cost of G-PP&E*. The standard reaffirms that Federal entities should

report their general PP&E based on historical cost in accordance with the asset recognition and measurement provisions of the earlier property accounting standards. However, the standard clarifies that it is acceptable to use reasonable estimates of historical costs to value general PP&E assets. The proper and effective implementation of this accounting standard will be an important step for NASA in remediating the material weakness in internal controls over legacy assets in FY 2010.

During FY 2009, in preparation for the issuance of SFFAS No. 35, NASA performed an analysis of costs that were capitalized for major components of the International Space Station (ISS) and the Space Shuttle. During this analysis, NASA changed its capitalization-policy for Integration and Operations costs associated with the ISS, which was placed into service on September 30, 2001, and also changed its policy for capitalizing Shuttle launch service costs associated with the ISS. Because these policy changes affected costs that had been capitalized since 2001, they resulted in the reclassification of approximately \$11 billion of ISS costs; and because many of the adjustments affected prior periods, they represent a correction of an error in the financial statements.

The Agency's ongoing efforts to develop a robust and rigorous review process that both validates and challenges the adequacy of estimation techniques and the sufficiency of supporting documentation will serve the Agency well in preparing for the audit of these estimates in FY 2010 and future years.

#### *Environmental Liability Estimation*

Over the years, NASA has addressed challenges associated with estimating its unfunded environmental liability (UEL). The current challenge identified in the FY 2009 audit focuses on establishing and implementing an Agency-wide policy to capture cleanup costs for removing, containing, and/or disposing of hazardous waste from property or material associated with the permanent or temporary shutdown of a program.

SFFAS No. 6, *Accounting for Property, Plant, and Equipment*, requires agencies to capture this information when placing applicable property into service. The standard has been in effect since FY 1998; however, NASA made its first attempt to implement the standard in September 2009. Because the timing of this effort came so late in the fiscal year, it placed the Agency under severe time constraints, which compromised the effectiveness of the process for estimating and disclosing the costs in the financial statements. As a result, NASA needs to take additional steps to enhance and formalize the process for estimating environmental cleanup costs under SFFAS No. 6.

In addition, during FY 2009 NASA changed the timeframe it uses to estimate its environmental liability to clean up contaminated sites. NASA now limits the length of the remediation period included in the UEL accrual estimates to 30 years as of the Balance Sheet date. According to NASA, beyond a 30-year horizon UEL estimates have not proven to be reliable for presentation in the financial statements. While NASA's guidance regarding UEL estimates is under continued revision, NASA has articulated that it will consider reliable engineering estimates beyond the 30-year period while developing the accrual estimates.

To overcome the challenges associated with estimating its UEL, NASA needs to implement controls that are designed to coordinate changes in accounting policy related to environmental liabilities so as to ensure these policies comply with GAAP and are implemented appropriately.

#### *Compliance with the Federal Financial Management Improvement Act of 1996*

Substantial compliance with FFMIA has been elusive for the Agency. Under FFMIA, E&Y is required to report whether NASA's financial management systems substantially comply with Federal financial management systems requirements, applicable Federal accounting standards, and the United States Standard General Ledger at the transaction level. E&Y noted certain instances, described below, in which NASA's financial management systems did not substantially comply with Federal system and Federal accounting standard requirements:

- The real property system is not integrated with the Core Financial module.
- IT audits note issues related to access and change management.
- NASA was unable to meet certain requirements to ensure compliance with Federal accounting standards for legacy assets.

NASA should move forward with its plans in FY 2010 to integrate Government-held real property transactions into the Asset Accounting module of its integrated

financial management system and to improve implementation of SFFAS No. 35, Estimating the Historical Cost of G-PP&E.

**Closing**

That concludes our prepared remarks. We would be happy to answer any questions you might have.

Chairman MILLER. Thank you, Mr. Martin. I understand Mr. Howard is not going to give opening testimony but yours is his as well and is here to answer questions. Mr. Howard can tell you, if you don't know already, that not all NASA's inspector generals have been warmly received by this Committee. So we look forward to continuing to receive you warmly.

I now recognize Mr. Murrin for 5 minutes. Turn your microphone on, please.

**STATEMENT OF DANIEL J. MURRIN, PARTNER, ASSURANCE AND ADVISORY BUSINESS SERVICES, ERNST & YOUNG, LLP**

Mr. MURRIN. Good afternoon, Chairman Miller and Giffords and members of the Subcommittees. My name is Daniel Murrin. Thank you for the opportunity to testify before the Committee and answer any questions you may have. I am a partner in Ernst & Young LLP, a public accounting firm, and I have been in public accounting for over 30 years with a specialty in public sector auditing for the Federal Government.

We have been asked to share with the Subcommittees the results of the fiscal year 2009 audit including the issues identified and our recommendations to correct them. This is our sixth audit of NASA for which I am the engagement partner. The NASA Office of Inspector General engaged Ernst & Young to conduct the audits of NASA's financial statements for fiscal years 2004 through 2009. Our testimony today will focus on our fiscal year 2009 audit.

As you are aware, Ernst & Young issued a disclaimed opinion with respect to NASA's September 30, 2009, financial statements. Concurrent with the issuance of our audit report, we issued a Report on Internal Controls which detailed one material weakness and two significant deficiencies with eight recommendations to assist NASA in addressing internal control deficiencies.

We also issued a report on compliance with laws and regulations and cited non-compliance with the Federal Financial Management Improvement Act. In my oral testimony today, I will give a brief overview of each report with a particular focus on the disclaimed opinion and the related recommendations. My written testimony goes into greater detail for your reference.

Let me first discuss the Report of Independent Auditors. The reasons to disclaim on these financial statements for fiscal year 2009 really flow from the property, plant and equipment, PP&E, and the related which really have been a longstanding concern for NASA and relate principally to assets that are capitalized in prior years which were not susceptible to audit. Those matters are reported as a material weakness in our Report on Internal Control.

Progress has been made by NASA by revising its policies, and NASA has gained a deeper understanding of the components and its costs of capitalized assets. The adoption in fiscal year 2010 of the Statement of Federal Financial Accounting Standards No. 35

regarding estimating the historical cost of governmental PP&E provides a unique opportunity for NASA to address the legacy valuation issues which have impaired its ability to prepare auditable financial statements.

In our Report on Internal Controls, we made two recommendations. The first recommendation is that NASA continue to improve implementation of the new standard. Areas for particular focus included the appropriate approaches in critically assessing prior recorded amounts for legacy assets when the initial documentation to support those amounts is not available and the extent to which the entity must associate ongoing outlays with individual items of PP&E versus recording amounts based on contractor-provided estimates in bulk.

The second recommendation is really that NASA develop an overarching key control activity that provides for a robust and rigorous review that both validates and challenges the adequacy of the estimation techniques used and the sufficiency of the documentation supporting those conclusions.

The Shuttle program is currently scheduled for decommissioning in fiscal year 2010. The ISS is also nearing the end of its initially estimated useful life. The gradual reduction and the relative materiality of those assets combined with the flexibility provided for the new standard are expected by management to help resolve the longstanding issues and barriers to the clean opinion.

Ernst & Young issued a Report on Internal Control documenting one material weakness discussed above and also two significant deficiencies. The first significant deficiency relates to NASA's environmental liability and the need to continue the enhancement of that area, and I would be pleased to discuss that further as appropriate. And the second significant deficiency which, again, is a modified repeat condition related to NASA's financial systems not being substantially compliant with FFMIA.

While I have been asked to really address the issues and recommendations in my testimony today, I would like to take a minute to note that substantial improvements have been made in managing the business of NASA. Since our audit of 2004 and certainly the financial management issues that have been worked through systemically by prior groups of CFOs and OIGs have made progress, and we do note that progress.

Thank you, and I would be pleased to answer any questions you may have.

[The prepared statement of Mr. Murrin follows:]

PREPARED STATEMENT OF DANIEL J. MURRIN

### **Introduction**

My name is Daniel J. Murrin. I am a Partner and Americas Director of Government and Public Sector Services for Ernst & Young LLP, a public accounting firm. I have been in public accounting for over 30 years, with a specialty in public sector auditing for the Federal Government. We have been asked to share with the Subcommittees the result of the fiscal year 2009 audit, as it relates to the decision by Ernst & Young to disclaim an opinion. In addition the Committee has requested that we share our recommendations to correct the deficiencies we have noted. This is our sixth audit of National Aeronautics and Space Administration (NASA), for which I am and have been the Engagement Partner. The NASA, Office of Inspector General, engaged Ernst & Young to conduct the audits of NASA's financial state-

ments for the fiscal years ended September 30, 2004—September 30, 2009. Our testimony today will focus on our fiscal year 2009 audit.

I will first make general comments on the scope of our contract with the Office of Inspector General, provide an overview of our audit and discuss in more detail the three reports issued as a result of an audit (1) Report of Independent Auditors; (2) Report on Internal Control; and (3) Report of Compliance with Laws and Regulations. I will then provide the results of our fiscal year 2009 audit as outlined in the three reports issued.

#### *Scope of Ernst & Young's Contract With The Office of Inspector General*

The Office of Inspector General engaged Ernst & Young LLP, (EY) to conduct the audit of the fiscal year 2009 financial statements for the purpose of satisfying the requirements of the Government Management Reform Act (GMRA) of 1994. The following reports are required for a financial statement audit of the Federal agency: Report of Independent Auditors,<sup>1</sup> Report on Internal Control,<sup>2</sup> and a Report of Compliance with Laws and Regulations.<sup>3</sup>

The engagement to audit was to be performed in accordance with *Government Auditing Standards*, issued by the Comptroller General of the United States, Office of Management and Budget (OMB) Bulletin No. 07-04<sup>4</sup> as amended, *Audit Requirements for Federal Financial Statements*, and generally accepted auditing standards issued by the American Institute of Certified Public Accountants (AICPA).

#### *Overview of Fiscal Year 2009 Audit Reports*

Ernst & Young LLP issued a disclaimed opinion in the Report of Independent Auditors with respect to NASA's September 30, 2009 financial statements. Concurrent with the issuance of our Auditors Report, we issued a Report on Internal Con-

<sup>1</sup> **Report of Independent Auditors**—Determine and report on whether the financial statements and related notes present fairly, in all material respects, the assets, liabilities, and net position; net costs; changes in net position; and budgetary resources; in conformity with the accounting principles generally accepted in the United States.

The audit is to render an opinion on these statements, which could result in a: (1) unqualified or clean opinion; (2) qualified opinion; (3) adverse opinion; or (4) a disclaimer of an opinion.

As further discussed below, our Report of Independent Auditors for fiscal year 2009, disclaimed an opinion on the NASA financial statements.

<sup>2</sup> **Report on Internal Controls**—Report based on the work performed in our audit findings regarding whether NASA's internal control provide reasonable assurance of achieving the internal control objectives described in OMB Bulletin No. 07-04, *Audit Requirements for Federal Financial Statements*. Internal controls are important to assure programs achieve intended results and that programs and resources are protected from waste, fraud, and mismanagement.

<sup>3</sup> **Report of Compliance with Laws and Regulations**—Report on whether NASA complied with applicable Federal laws and regulations which could have had a direct and material effect on the principal financial statements. Reports matters noted based upon the work performed in connection with our procedures.

<sup>4</sup> OMB Bulletin No. 07-04 sets forth the audit requirements for Federal Financial Statements. The Bulletin is designed to provide the necessary audit guidance in connection with the implementation of the Chief Financial Officers (CFO) Act, as expanded by the Government Management Reform Act (GMRA) of 1994, and provides formal definitions for a number of technical terms and requirement used throughout the Bulletin and formalizes a number of significant CFO Act requirements including:

- Defines audit scope
- Provides agency Inspector General's (IG) with primary responsibility for the execution of audits; allows the IG to provide for the execution of the audit by independent external auditors, and provides for audits to be performed by the Comptroller General of the United States (in consultation with the IG)
- Provides guidance on the IGs role, such as to:
  - Ensure that audits are performed and audit reports completed in a timely manner and in accordance with the requirement of this Bulletin. This responsibility pertains to audits conducted directly by IG staff and audits conducted by independent auditors under contract.
  - Provide technical advice and liaison to agency officials and independent external auditors.
  - Obtain or make quality control reviews of audits made by independent external auditors and provide the results, when appropriate, to other interested organizations.

trols which detailed one material weakness<sup>5</sup> and two significant deficiencies<sup>6</sup> with eight recommendations to assist NASA in addressing its internal control deficiencies. We also issued a Report on Compliance with Laws and Regulations and cited noncompliance with the Federal Financial Management Improvement Act. As we will note, the Fiscal Year 2009 result was an improvement over Fiscal Year 2008, but efforts to improve the NASA Financial Management are ongoing.

*Report of Independent Auditors and Obstacles to a Clean Opinion*

EY disclaimed an opinion with respect to the: (1) Consolidated Balance Sheet; (2) Consolidated Statement of Net Cost; (3) Consolidated Statement of Changes in Net Position; and (4) Combined Statement of Budgetary Resources for the year ended September 30, 2009.

The reasons to disclaim our opinion on the statements mentioned above for fiscal year 2009 flow from property, plant and equipment (PP&E) related issues which have been a long standing concern for NASA. As noted in our Report of Independent Auditors, during fiscal year 2009, NASA continued its focused efforts to resolve long-term issues identified in its financial management processes and systems. Although significant progress has been made, NASA management and our work continue to identify issues related to internal control in its property accounting, principally relating to assets capitalized in prior years. Legacy financial and property management systems for NASA were developed and implemented in an era before certain such equipment was required to be capitalized and accounted for in NASA's periodic financial reports. Systems and processes which were developed to support processing of contract actions and payments were not initially as intently focused on developing information needed to assess when property transactions were being executed and ensuring that such actions were appropriately accounted for under accrual accounting concepts embedded in applicable accounting standards. Those standards, developed by the Federal Accounting Standards Advisory Board (FASAB) have also evolved over time.

Over the last several years, NASA has recorded a series of adjustments to reduce PP&E totaling approximately \$20 billion which, when combined with the impact of periodic amortization for depreciation, offset in part by new acquisitions, have reduced the net recorded value for NASA's PP&E from \$33.2 billion as of September 30, 2006 to \$11.6 billion at September 30, 2009. An additional approximately \$3 billion in inventors and related property are also reflected in NASA's financial statements throughout this period utilizing similar systems and processes. The internal control issues noted, continuation of such adjustments, and the relative significance of the aggregate amounts in relation to total NASA assets and net costs in the range of \$23 billion in the last several years precluded us from forming an opinion on the NASA financial statements.

Progress has been made in revising NASA's policies and NASA has gained a deeper understanding of the components of its capitalized assets. The adoption of Statement of Federal Financial Accounting Standards (SFFAS) No. 35, *Estimating the Historical Cost of G-PP&E*, in FY 2010 provides a unique opportunity for NASA to address the legacy valuation issues which have impaired its ability to prepare auditable financial statements.

SFFAS No. 35 provides additional flexibility to NASA in recreating and establishing reasonable estimates of its PP&E activity and costs. This flexibility is expected to aid NASA in supporting its recorded balances and subjecting them to audit.

As noted above, issues regarding whether broad components of PP&E should be recorded have arisen and been addressed over the last several years, in each case calling into question the reliability of prior processes and reported amounts. In connection with critically assessing management's reported amounts for PP&E in FY 2010 and subsequent years, as valuation issues are addressed utilizing the ongoing flexibility in the new FASAB guidance, the need to ensure that property records are complete and property items can be associated with estimates of their original acquisition costs consistent with the guidance in SFFAS No. 35 will loom larger. Subjecting such processes to rigorous self-assessment under management's internal control review process under OMB Circular A-123, Management's Responsibility for Internal Control, Appendix A—Internal Control over Financial Reporting, and robust

<sup>5</sup>A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

<sup>6</sup>A *significant deficiency* is a deficiency or a combination of deficiencies in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

assessments of the legacy property records for completeness and accuracy, perhaps in conjunction with ongoing monitoring activities, will serve NASA well in ensuring that reported amounts are complete and reliable.

NASA is currently participating in work groups intended to assist agencies in exploring supportable approaches to developing valuation estimates and supporting such amounts to the extent needed to withstand audit processes, with an initial particular focus on contractor-held property. These deliberations may impact NASA and third-party assessments of whether the initial processes developed by NASA in an effort to address anticipated changes in the FASAB literature conform to the financial management community's implementation guidelines for SFFAS No. 35. Going forward, internal controls, which have been revised to account for acquisitions of property under contracts with effective dates after October 1, 2007, hold promise in addressing new acquisitions; however, the effectiveness of such controls cannot currently be assessed pending issuance of new contracts that would be impacted by this policy.

In our Report on Internal Controls, we recommended that NASA:

1. Continue to actively improve implementation of SFFAS No. 35. Areas for particular focus include: (1) appropriate approaches in critically assessing prior recorded amounts for legacy assets when the initial documentation to support recorded amounts is not available, and the extent to which such initial recorded amounts, perhaps in conjunction with budgetary or other collaborative information, can be viewed as reasonable estimates; and (2) the extent to which the entity must associate ongoing outlays with individual items of PP&E versus recording amounts based on contractor-provided estimates in bulk, particularly for legacy contracts which do not contain current NASA requirements intending to aid in identifying when PP&E is being acquired, and NASA's responsibilities to verify reported amounts.
2. Develop an overarching key control activity that provides for a robust and rigorous review that both validates and challenges the adequacy of estimation techniques used and the sufficiency of documentation supporting those conclusions. This type of ongoing control activity is crucial for NASA as it implements and sustains any estimation modeling for valuing components of its PP&E. In addition, management should utilize existing monitoring activities and internal control assessments with a particular emphasis at the Center level in demonstrating that a comprehensive control process has been used to verify that detail property records are complete and reflect all PP&E, are reconciled to the recorded amounts in the general ledger, constitute NASA's best estimates consistent with SFFAS No. 35 of the historical costs of such items and that available information to aid in collaborating such amounts has been validated and appropriately considered.

The Space Shuttle program is currently scheduled for decommissioning in fiscal year 2010, and the International Space Shuttle (ISS), which is also being depreciated, is also nearing the end of its initially estimated useful life. The gradual reduction in the relative materiality of these legacy assets which have had intractable cost estimation issues, combined with the flexibility embedded in SFFAS 35, are expected by management to help resolve the large standing barriers to a clean opinion.

#### *Report on Internal Control*

Ernst & Young issued a Report on Internal Control documenting one material weakness and two significant deficiencies as noted in Attachment B, and in our Independent Auditors Report. The FY 2009 result reflects progress NASA has made in addressing issues raised in prior years, and reflects a reduction in aggregate significant comments from two material weaknesses in FY 2008 to one material weakness in FY 2009. The following is the material weakness and significant deficiencies issued in FY 2009:

- Enhancements Needed for Controls over Legacy PP&E and Materials Contracts, But SFFAS No. 35 Adoption May Aid In Resolving This Longstanding Issue (Modified Repeat Condition classified as a material weakness, further discussed above)
- Processes in Estimating NASA's Environmental Liability Continue to Require Enhancement (Modified Repeat Condition)
- Financial Management Systems Not in Substantial Compliance with FFMIA (Modified Repeat Condition)

*Report on Compliance with Laws and Regulations*

The Report on Compliance with Laws and Regulations noted that NASA had not complied with the Federal Financial Management Improvement Act (FFMIA) of 1996. The principal components of such non compliance related to ongoing efforts to integrate property information with the financial management system. A key indication of FFMIA compliance also flows from the inability to obtain an unqualified audit opinion. The Report on Internal Control includes information related to the financial management systems that were found not to comply with the requirements, and presents relevant facts pertaining to the noncompliance and our recommendations related to the specific issues.

*Improvements have been made in managing the business of NASA*

While legacy property issues continue to challenge NASA, progress was made in fiscal year 2009 in addressing issues noted in fiscal year 2008 and prior audits. As NASA's system implementation was matured, financial management issues have been systematically addressed. For example, NASA:

- In FY 2009, NASA management continued to refine the Continuous Monitoring Program—a monthly process performed at the Centers and forwarded to Headquarters that is designed to identify issues impacting the integrity of the Centers' financial management information and provide a means for communicating and tracking of the issues centrally within the Headquarters—through training and improved guidance to allow for reliance on this entity-wide control process.
- Routine reconciliations and analysis of financial statements and non-property related accounts were being performed with significant differences being reconciled on a timely basis.

While our testimony today largely focuses on fiscal year 2009, we note that these efforts built on strides made since our initial audit in fiscal year 2004 to leverage investment in a new management information system and build out of financial management oversight capabilities. The three matters noted in our fiscal year 2009 Report on Internal Controls are briefly summarized below, and further discussed in Attachments A and B.

**Enhancements Needed for Controls over Legacy PP&E and Materials Contracts, But SFFAS No. 35 Adoption May Aid In Resolving This Longstanding Issue**

Prior-year audit reviews of legacy PP&E identified serious weaknesses in the design of internal controls over the completeness and accuracy of legacy assets which prevented material misstatements from being detected and corrected in a timely manner by NASA. Certain legacy issues noted in prior-year audit reports continue to challenge the Agency, particularly in relation to the International Space Station (ISS) and Space Shuttles. During FY 2009, NASA management undertook a systematic process to address the valuation and completeness issues related to the ISS and Space Shuttle assets in anticipation of an FY 2009 release of the Federal Accounting Standards Advisory Board (FASAB) Statement of Federal Financial Accounting Standards (SFFAS) No. 35, *Estimating the Historical Cost of G-PP&E*, which was ultimately released in FY 2010. This standard is expected to substantially improve NASA's ability to account for these assets in accordance with generally accepted accounting principles in FY 2010. Note that Space Shuttle assets will be fully depreciated in FY 2010 as they will have reached the end of their useful lives and this timing coincides with the Space Shuttle Transition program. Adoption of changes in the internal control process associated with new contracts also holds promise in resolving these issues over time.

During the past several years, NASA has continued to revise and correct its records for legacy assets to address these legacy issues. These legacy issues fundamentally flowed from the lack of a robust control structure whereby NASA did not determine at the point of budget formulation, obligation recognition, contract development, accounts payable recognition or disbursement the amounts of property it expects to buy; has contracted for or has purchased.

Further information regarding this matter is provided earlier in connection with our discussion of Obstacles to a Clean Opinion.

**Processes in Estimating NASA's Environmental Liability Continue to Require Enhancement**

NASA's environmental liability is estimated at \$922 million as of September 30, 2009, including the estimated environmental cleanup cost associated with PP&E. We noted that the NASA Office of the Chief Financial Officer (OCFO) and the Envi-

ronmental Management Division (EMD) invested resources to resolve our prior-year finding related to the internal controls for the unfunded environmental liability (UEL) estimation process. NASA developed an estimate in September 2009 of the anticipated environmental cleanup costs associated with PP&E, implementing our prior recommendation to develop such estimate in accordance with SFFAS No. 6, *Accounting for Properly, Plant, and Equipment*. The joint review process, a key control NASA implemented to enhance its estimation processes, began to mature in FY 2009 and added additional consistency to the UEL estimation process. While NASA continues to make year-to-year progress, we noted weaknesses in NASA's ability to generate an auditable estimate on a timely basis of its UEL environmental cleanup costs and its environmental liabilities associated with PP&E.

#### **Financial Management Systems Not in Substantial Compliance with FFMIA**

NASA's financial management systems are not substantially compliant with the Federal Financial Management Improvement Act of 1996 (FFMIA). During FY 2009, NASA management took actions to address its noncompliance with the FFMIA. Although these steps corrected certain weaknesses noted during the past five years, other weaknesses continue to exist. Our discussions with NASA management indicated that its corrective action plans, related to environmental liabilities, PP&E, property system integration and systems security, are scheduled to have certain issues resolved during FY 2010.

#### ATTACHMENT A

#### **Summary of Fiscal Year 2009 Report of Internal Controls**

The chart below summarizes the current status of the prior year weaknesses, as well as any new weaknesses identified during the fiscal year 2009 audit. Details for fiscal year 2009 comments are included in Attachment B.

#### Summary of FY 2008 Material Weaknesses

Issue Area FY 2008	Summary Control Issue FY 2008	FY 2009 Status
<b>Material Weaknesses</b>		
Financial Systems, Analyses, and Oversight	<ul style="list-style-type: none"> <li>• Continuous Monitoring Program</li> <li>• Financial Statement Preparation Process</li> <li>• Continued Efforts needed to Resolve Data Integrity Issues</li> <li>• Processes in estimating NASA's Environmental Liabilities continue to require enhancements.</li> <li>• Financial management systems not in substantial compliance with FFMIA.</li> </ul>	Significant improvements noted. Aspects related to UEL and FFMIA compliance reported as significant deficiencies.
Enhancements Needed for Controls over PP&E and Materials Contracts	<ul style="list-style-type: none"> <li>• Enhancements Needed for Controls over Legacy PP&amp;E and Materials Contracts</li> </ul>	Improvements noted pending SFFAS No. 35 adoption. Modified repeat condition.

A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

A *significant deficiency* is a deficiency or a combination of deficiencies in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

## ATTACHMENT B

**Detail of Material Weakness and Significant Deficiencies (Extracted from page F-52—F-58 of the NASA FY 2009 Performance and Accountability Report)**

**Material Weakness**

**Enhancements Needed for Controls over Legacy PP&E and Materials Contracts, But SFFAS No. 35 Adoption May Aid In Resolving This Longstanding Issue (Modified Repeat Condition)**

Prior-year audit reviews of legacy PP&E identified serious weaknesses in the design of internal controls over the completeness and accuracy of legacy assets which prevented material misstatements from being detected and corrected in a timely manner by NASA. Certain legacy issues noted in prior-year audit reports continue to challenge the Agency, particularly in relation to the International Space Station (ISS) and Space Shuttles. During FY 2009, NASA management undertook a systematic process to address the valuation and completeness issues related to the ISS and Space Shuttle assets in anticipation of an FY 2009 release of the Federal Accounting Standards Advisory Board (FASAB) Statement of Federal Financial Accounting Standards (SFFAS) No. 35, *Estimating the Historical Cost of G-PP&E*, which was ultimately released in FY 2010. This standard is expected to substantially improve NASA's ability to account for these assets in accordance with generally accepted accounting principles in FY 2010. Note that Space Shuttle assets will be fully depreciated in FY 2010 as they will have reached the end of their useful lives and this timing coincides with the Space Shuttle Transition program. Adoption of changes in the internal control process associated with new contracts also holds promise in resolving these issues over time.

During the past several years, NASA has continued to revise and correct its records for legacy assets to address these legacy issues. These legacy issues fundamentally flowed from the lack of a robust control structure whereby NASA did not determine at the point of budget formulation, obligation recognition, contract development, accounts payable recognition or disbursement the amounts of property it expects to buy, has contracted for or has purchased. For example:

- In FY 2007, NASA recorded a \$12.7 billion adjustment to write off the net book value (NBV) of legacy assets (previously reported as "theme assets") which it believed were inappropriately capitalized since NASA's implementation of SFFAS No. 6, *Accounting for Property Plant and Equipment*, in FY 1998. NASA recorded this adjustment as a change in accounting principle based upon a technical release issued by the Accounting and Auditing Policy Committee of the FASAB. Prior to this cumulative effect adjustment, the NBV of NASA's PP&E was \$33.3 billion as of September 30, 2006.
- In FY 2008, NASA recorded an adjustment of \$2.9 billion to expense costs previously capitalized as launch costs during the year as these costs were associated with taking foreign-owned components, rather than government-owned components, to the ISS. Prior to this year-end adjustment, the NBV of NASA's PP&E would have been \$24.5 billion as of September 30, 2008. The process to correct this item in FY 2008 was an indicator of the effectiveness of some of the financial management review processes which NASA had been developing, but also highlighted the need for the development of consistent controls regarding capitalization approaches, with appropriately vetted position papers and notification for pending areas of review to ensure that no significant year-end adjustments are needed. As noted below, launch cost calculations were revisited in FY 2009, and additional errors were noted.
- In FY 2009, NASA recorded a series of adjustments during the third and fourth quarters to correct for additional errors in the valuation of legacy assets related to the accounting for launch costs and integration and operational costs capitalized as part of the ISS. During NASA's analysis of the accounting for launch costs, management concluded that prior methodologies and amounts recorded were inaccurate since FY 1998, when the first component of the ISS was carried by the Space Shuttle. Management recorded a \$5.2 billion adjustment to write off the NBV of previously capitalized launch costs.

Management revised its methodology during FY 2009 and, based upon its new estimates, it recorded an adjustment of \$84 million to capitalize the NBV of launch costs. In our initial reviews of management's revised methodology, developed in anticipation of the release of SFFAS No. 35, and estimation for capitalized launch costs, we noted that estimates were not fully supported by prior historical cost data, but management believes it has sufficient information to support reasonable estimates of such costs consistent with SFFAS No. 35 which will be effective in FY 2010.

- Ongoing efforts by NASA management to develop a robust and rigorous review process that both validates and challenges the adequacy of estimation techniques used and the sufficiency of documentation supporting those conclusions will serve NASA management well in preparing for the audit of these estimates. This type of ongoing control activity is crucial for the Agency as it implements and sustains any estimation modeling for valuing components of its PP&E. For the integration and operational costs, NASA noted that it had been capitalizing Integration and Operations (I&O) costs associated with the ISS after the ISS was placed into service on September 30, 2001. According to NASA's inquiries of an ISS specialist, these costs included ground and flight support, maintenance and repairs and NASA's current financial management team concluded these costs should have been expensed as operation costs and not capitalized. Management recorded a \$1.4 billion adjustment to write off the NBV of previously capitalized I&O costs. Prior to these FY 2009 recorded adjustments, the NBV of NASA's PP&E would have been \$18.1 billion as of September 30, 2009.

Progress has been made in revising NASA's policies and NASA has gained a deeper understanding of the components of its capitalized assets. The adoption of SFFAS No. 35, *Estimating the Historical Cost of G-PP&E*, in FY 2010 provides a unique opportunity for NASA to address the legacy valuation issues which have impaired its ability to prepare auditable financial statements. As noted above, issues regarding whether broad components of PP&E should be recorded have arisen and been addressed over the last several years, in each case calling into question the reliability of prior processes and reported amounts. In connection with critically assessing management's reported amounts for PP&E in FY 2010 and subsequent years, as valuation issues are addressed utilizing the ongoing flexibility in the new FASAB guidance, the need to ensure that property records are complete and property items can be associated with estimates of their original acquisition costs consistent with the guidance in SFFAS No. 35 will loom larger. Subjecting such processes to rigorous self assessment under management's internal control review process under OMB Circular A-123, *Managements Responsibility for Internal Control*, Appendix A—Internal Control over Financial Reporting, and robust assessments of the legacy property records for completeness and accuracy, perhaps in conjunction with ongoing monitoring activities, will serve NASA well in ensuring that reported amounts are complete and reliable. NASA is currently participating in work groups intended to assist agencies in exploring supportable approaches to developing valuation estimates and supporting such amounts to the extent needed to withstand audit processes, with an initial particular focus on contractor-held property. These deliberations may impact NASA and third-party assessments of whether the initial processes developed by NASA in an effort to address anticipated changes in the FASAB literature conform to the financial management community's implementation guidelines for SFFAS No. 35. Going forward, internal controls, which have been revised to account for acquisitions of property under contracts with effective dates after October 1, 2007, hold promise in addressing new acquisitions; however, the effectiveness of such controls cannot currently be assessed pending issuance of new contracts that would be impacted by this policy.

#### **Recommendation**

We recommend that NASA:

1. Continue to actively improve implementation of SFFAS No. 35. Areas for particular focus include: (1) appropriate approaches in critically assessing prior recorded amounts for legacy assets when the initial documentation to support recorded amounts is not available, and the extent to which such initial recorded amounts, perhaps in conjunction with budgetary or other collaborative information, can be viewed as reasonable estimates; and (2) the extent to which the entity must associate ongoing outlays with individual items of PP&E versus recording amounts based on contractor-provided estimates in bulk, particularly for legacy contracts which do not contain current NASA requirements intending

to aid in identifying when PP&E is being acquired, and NASA's responsibilities to verify reported amounts.

2. Develop an overarching key control activity that provides for a robust and rigorous review that both validates and challenges the adequacy of estimation techniques used and the sufficiency of documentation supporting those conclusions. This type of ongoing control activity is crucial for NASA as it implements and sustains any estimation modeling for valuing components of its PP&E. In addition, management should utilize existing monitoring activities and internal control assessments with a particular emphasis at the Center level in demonstrating that a comprehensive control process has been used to verify that detail property records are complete and reflect all PP&E, are reconciled to the recorded amounts in the general ledger, constitute NASA's best estimates consistent with SFFAS No. 35 of the historical costs of such items and that available information to aid in collaborating such amounts has been validated and appropriately considered.

### Significant Deficiencies

#### Processes in Estimating NASA's Environmental Liability Continue to Require Enhancement (Modified Repeat Condition)

NASA's environmental liability is estimated at \$922 million as of September 30, 2009, including the estimated environmental cleanup cost associated with PP&E. We noted that the NASA Office of the Chief Financial Officer (OCFO) and the Environmental Management Division (EMD) invested resources to resolve our prior-year finding related to the internal controls for the unfunded environmental liability (UEL) estimation process. NASA developed an estimate in September 2009 of the anticipated environmental cleanup costs associated with PP&E, implementing our prior recommendation to develop such estimate in accordance with SFFAS No. 6, *Accounting for Property, Plant, and Equipment*. The joint review process, a key control NASA implemented to enhance its estimation processes, began to mature in FY 2009 and added additional consistency to the UEL estimation process. While NASA continues to make year-to-year progress, we noted weaknesses in NASA's ability to generate an auditable estimate on a timely basis of its UEL environmental cleanup costs and its environmental liabilities associated with PP&E. Specifically:

- While the estimates for environmental costs associated with PP&E were not provided with sufficient time to support the audit process, NASA has acknowledged a need to develop training and controls supporting the development of the estimates, and noted that the estimates were initially developed under severe time constraints and resource limitations. To the extent further such resources and adequate time are devoted to this process, changes in the estimates may emerge. This includes but is not limited to the reclassification of SFFAS No. 5 liabilities to SFFAS No. 6.
- Approximately \$170 million, or 17% of the UEL estimate, is developed using the parametric models within NASA's Integrated Data Evaluation & Analysis Library (IDEAL) estimating software. NASA has not completed the design and implementation of its general and application controls for this model. Examples include: NASA-prepared security plans for IDEAL, in which it indicated that actions to mitigate security risks need to be resolved. NASA finalized its Configuration Management Plan and verification reports for five centers in October 2009. A preliminary assessment noted that the Configuration Management Plan did not address system audits or reporting. We noted that preliminary analysis of the verification reports revealed certain unit costs embedded in IDEAL indicate that such factors may be overstated by 100% and 300%, but NASA has not yet fully assessed how, if at all, to change the models for this finding, or completed an analysis of other such inputs. In addition, NASA has had large year-to-year changes in environmental estimates, due in part to varying interpretations of certain markup definitions in the software and, as discussed below, revisions to its process used in assessing the number of years for which sufficiently reliable cost estimates can be developed.
- During FY 2009, NASA revised its estimation process to reflect that in general UEL estimates for the first 30 years of a project's lifespan will be recorded as a liability in the NASA financial statements. While the guidance is under continued revision, it is our understanding that if a sufficiently reliable engineering estimate has been developed beyond this 30-year period, such estimate will be considered in developing the accrual. This revision in the estimation process resulted in an approximate 25% reduction in the ac-

cruel for the related estimates. The process to develop this revision in NASA's procedures called into question the extent of coordination between OCFO and EMD, with aspects of the policy as initially articulated not conforming to GAAP. In addition, no formalized process for calculating and aggregating the SFFAS No. 5 reasonably possible estimate has been established. In FY 2009, an initial reasonably possible estimate was intended in part to capture the portion of long-term UEL estimates which exceeded 30 years and by definition, under NASA's policy, was judged not to be sufficiently reliable to record in the accrual, calling into question the reliability of the information for disclosure purposes as well. The estimate was compiled and aggregated by EMD with little support from the individual project managers, and OCFO was not aware of the process.

### **Recommendation**

As it relates to the estimation of environmental liabilities, we recommend that NASA:

1. Enhance and formalize the process it has developed to estimate environmental cleanup costs under SFFAS No. 6, *Accounting for Property, Plant, and Equipment*, including dedicating additional resources to ensure compliance with the requirements, implementing internal controls and developing training. To the extent a portion of the previously reported environmental liability estimates subsume closure costs more appropriately recognized under SFFAS No. 6, NASA financial reporting can be enhanced by reclassification of footnote disclosures for such costs.
2. Complete the development and implementation of general and application controls as they relate to IDEAL. The initial focus should be on demonstrating the accuracy of both the parametric model and aggregation output. An alternative recommendation is to use a commercially available software tool that already meets these conditions.
3. Recode IDEAL to simplify markup inputs. For example, at present, the prime contractor markup is comprised of two embedded components to capture markup for the prime contractor and subcontractor, which should be revised to only allow input for one NASA component at a time. Re-emphasize in the annual training provided to NASA's center EMD and OCFO personnel the explanations of these entries.
4. Implement preventative actions (i.e., controls) to address change management for accounting policy alterations to environmental liabilities and implement rigorous quality control efforts regarding associated footnote disclosures of reasonably possible and recorded amounts, including explicit discussion and conclusion on these items in the joint review process. Assign roles and responsibilities for implementation and for proper communication throughout the organization.

### **Financial Management Systems Not in Substantial Compliance with FFMIA (Modified Repeat Condition)**

NASA's financial management systems are not substantially compliant with the Federal Financial Management Improvement Act of 1996 (FFMIA). During FY 2009, as discussed above, NASA management took action to address its noncompliance with the FFMIA. Although these steps corrected certain weaknesses noted during the past five years, other weaknesses continue to exist. Specific weaknesses noted include the following:

- The real property system is not integrated with the Core Financial Module.
- Issues related to access and change management were noted as a result of information technology (IT) audit procedures. The level of risk associated with these IT issues depends in part upon the extent to which financial-related compensating controls (such as reconciliations and data integrity reviews of output) are in place and operating effectively throughout the audit period. Certain of these controls designed to detect errors or inappropriate processing may also not be executed in a manner which can be expected to identify errors, which, while perhaps not material to the financial statements as a whole, may subject NASA to risks regarding safeguarding of assets. Although NASA has made progress in addressing and resolving prior-year IT findings, these IT-related issues, along with issues noted by Ernst & Young, the Government Accountability Office (GAO) and the NASA Office of Inspector General (OIG) in their reviews through the year, merit continued management focus.

- NASA was unable to meet certain requirements to ensure compliance with federal accounting standards, as discussed in various sections within this report.

**Recommendation**

We recommend that NASA:

1. Move forward to integrate government-held real property transactions into the Asset Accounting Module of SAP in February 2010 and continue efforts to integrate recording of PP&E transactions contemporaneous with their occurrence,
2. Resolve issues identified during our IT procedures in our audit related to access and change management surrounding its financial management systems.

Chairman MILLER. Thank you, Mr. Murrin. Dr. Robinson is recognized for 5 minutes.

**STATEMENT OF HON. ELIZABETH ROBINSON, CFO, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION**

Ms. ROBINSON. Thank you. Chairs Miller and Giffords and Ranking Members Broun and Olson and members of the Subcommittees, good afternoon, and thanks for the opportunity to appear today.

Before I begin my remarks, I would like to recognize two of the leaders from the CFO office who, along with many at NASA, have been doing all the hard work that has been recognized today and produced all the good results, Deputy CFO, Terry Bowie, and the Associate Deputy CFO, Bruce Ward. And there are many others, too. It has been a group effort.

Today I would like to briefly outline three points, many of which have already been discussed but the first one is the progress that NASA has made and what we have done over the last several years to explain the one main material weakness and then to describe NASA's path forward.

As everyone here today has noted, NASA has made significant progress in improving its financial processes and systems. There is a chart in my written testimony, but it shows that the last time we had a clean opinion was back in 2002. But then in 2003, NASA took the bold step of trying to consolidate all of the financial systems of its 10 centers and headquarters into one. But then systems and data issues caused some serious problems and resulted in the first of what had now been seven disclaimed opinions.

Since that time, though, systems improvements, data cleanup initiatives, policies and process changes, a lot of staff training and development, have helped to eliminate all of the material weaknesses except for one related to legacy property, plant and equipment or what people in the business call PP&E.

You have also heard that we have two significant deficiencies, not material ones but significant ones, related to NASA's environmental liability and compliance with the Federal Financial Management Improvement Act. For both items, NASA has plans in place to remediate the deficiencies. And before turning back to why the remaining material weakness continues to challenge the agency, I do want to assure the Committee that today, using current systems and processes, NASA is able to track and control its funds, account for the cost related to individual programs and projects, and manage the agency's day-to-day operations.

While accounting for the agency's legacy PP&E is an important financial statement issue, it does not impact the day-to-day and year-to-year operational decision-making at NASA.

Now to the second point explaining the material weakness. NASA's legacy PP&E, particularly in relation to the Space Station and Shuttles has been a challenge for the agency back to when the Federal Accounting Standards for Space Exploration Equipment were established in 1996. At that time, Federal standards required that such equipment be fully expensed in the year where the costs were incurred, and NASA complied with those requirements. Then in 1998, the standards were significantly changed to require that costs for such equipment and for NASA, the Shuttle and Station, be tracked as individual assets and not expensed when incurred as program costs and that those costs be depreciated or expensed over a specified number of years.

Now, NASA's processes and contracts were designed to comply with annual expense accounting requirements, not the new requirement for asset depreciation accounting, and consequently, NASA does not have the historical records necessary to support individual asset balances for the ISS and Shuttles.

Since 2002, when NASA received its last unqualified opinion, the agency has implemented significant changes to meet the revised accounting standards on a going-forward basis, but none of those efforts can recreate records that did not exist prior to 2003.

The Station and Shuttle had together a total net book value of approximately \$9 billion at the end of the fiscal year comprising about 77 percent of the total PP&E and 38 percent of total assets. Due to the size of the balances, the auditors have determined that NASA's lack of support for these asset balances resulted insufficient evidential support for them to complete their audit and hence, the disclaimed opinion.

It is important to note as has been stated before that the Space Station and Shuttle are scheduled for retirement in coming years, and continued depreciation of these assets is bringing the net asset balances on the balance sheet to levels that will become immaterial to financial statements. While the International Space Station depreciation schedule naturally leads to 2016 as an outside date for resolving all these issues, NASA has been working to achieve a timelier yet still cost-efficient and effective solution.

And so to the final point. What is the prognosis going forward? As the Chair mentioned, the FASAB, Financial Accounting Standards Advisory Board, on October 14 published a new standard, for the kinds of assets like the Shuttle and ISS. The standard amends the existing accounting standards to clarify the reasonable methods of estimating historical cost and accumulated depreciation may be used to value general PP&E. This is important to NASA because it provides a way forward. And as FASAB notes in the standard, the use of estimates is a more cost-effective means of valuing certain assets than reconstructing the history.

As recommended by the auditor, NASA will adopt the amended standards, but because the new standard does not provide a single specific method, implementation will require some collaboration among all of us to implement and implement correctly.

And so in closing, I would like to re-emphasize that NASA takes seriously the need to resolve its financial weakness and to continue to take the necessary steps to do so. We recognize the need to work with everyone at this table and others. But I also want to emphasize that NASA's financial systems are on a day-to-day basis and an annual basis very strong and can track all of the needed financial data for the agency's important decision making.

So thank you, and I look forward to hearing your questions. Thanks.

[The prepared statement of Ms. Robinson follows:]

PREPARED STATEMENT OF HON. ELIZABETH ROBINSON

Chairman Miller, Chairwoman Giffords, and Members of the Subcommittees, thank you for the opportunity to appear today to discuss the NASA FY 2009 audit report and the Agency's plan for correcting the longstanding material weakness identified in the auditor's disclaimed opinion on the Agency's financial statements. As the independent auditors and Inspector General have noted in their reports, NASA has made significant progress in improving its financial processes and systems. In fact, in FY 2009 NASA eliminated a longstanding material weakness related to financial systems, analyses, and oversight. However, while progress has been made, the Agency's financial management challenges have not yet been fully resolved.

The FY 2009 disclaimed audit opinion is the 7th consecutive disclaimed opinion NASA has received. NASA received its last unqualified opinion in FY 2002, when the Agency's independent auditors, PricewaterhouseCoopers, identified two material weaknesses; one related to controls over the Agency Property, Plant, and Equipment (PP&E) and the other related to controls over processes used to prepare financial statements and the Performance and Accountability Report. In FY 2002, NASA operated with 10 separate and unique center-based accounting systems. Information from these systems was integrated through electronic spreadsheets at the Agency level and consolidated into one Agency financial statement. In 2003, in line with Federal guidance, NASA implemented a new Agency-wide financial system that replaced the financial systems at its 10 centers and required the conversion and integration of data from those legacy systems.

This new integrated system was intended to improve access to information by decision makers across the Agency, standardize and speed reporting, and reduce costs. While NASA has since realized many of its initial goals and expectations, at the time, the Agency's Inspector General noted in testimony of May 2004 before the House Subcommittee on Government Efficiency and Financial Management, that "Many of the weaknesses the audit disclosed resulted from a lack of effective internal control procedures and problems with NASA's conversion during FY 2003 from 10 separate systems to a new single integrated financial management program (IFMP)." In 2003, the Agency received a disclaimed opinion.

NASA has been working to resolve those auditor-reported weaknesses over the past six years through systems improvements, data cleanup initiatives, policy and process changes, and staff training and development. As displayed in the attached chart, "Summary of Material Weaknesses During the Past Eight Years," the Agency's efforts have reduced the four material weaknesses in FY 2003 to one material weakness in FY 2009.

As of September 30, 2009, NASA's one outstanding material weakness was related to internal controls over legacy PP&E and materials contracts. The legacy PP&E weakness is related to internal control weaknesses in the Agency's space exploration PP&E, particularly the International Space Station (ISS) and the Space Shuttle. NASA's space exploration assets had a total net book value of \$8.9 billion as of September 30, 2009, comprising 77 percent of total PP&E (\$11.6 billion) and 38 percent of total assets (\$23.7 billion). The independent auditor's *Report on Internal Control* also identified two significant deficiencies. The first is related to processes used to estimate NASA's Environmental Liability. The auditors noted that while NASA continues to make year-to-year progress, the Agency also continues to have weaknesses in its ability to generate auditable Environmental Liability estimates on a timely basis. The second deficiency is related to a lack of substantial compliance with the Federal Financial Management Improvement Act of 1996 (FFMIA), including a lack of integration between NASA's real property system and its core financial system. The independent auditors and the NASA Inspector General noted that this year's

disclaimed opinion resulted from the continued weaknesses in internal controls over accounting for legacy PP&E.

**Background: Weaknesses in Controls Over Legacy PP&E and Materials Contracts**

The Federal accounting standards related to space exploration property have changed over the years, with serious impacts on NASA's financial statements.

When the Federal accounting standard for Property, Plant, and Equipment (Statement of Federal Financial Accounting Standards [SFFAS] No. 6, *Accounting for Property, Plant, and Equipment*) was introduced in 1996, space exploration equipment (including the ISS and Space Shuttle) was placed into a category called Federal Mission PP&E. SFFAS No. 6 contained explicit requirements for the costs of space exploration property to be expensed in the year incurred; no asset balances were to be maintained or reported for space exploration PP&E on the Agency's balance sheet. A separate category of PP&E, called General PP&E, was established at this time to address accounting requirements for more traditional PP&E (including buildings and land). Unlike Federal Mission PP&E, General PP&E are recognized as assets and are reported on an entity's balance sheet. Determining a balance for General PP&E assets requires tracking costs at the individual asset level and expensing (depreciating) those costs over a specified period of years. Consistent with these standards, NASA expensed all space exploration equipment in the year that costs were incurred.

The Federal Financial Accounting Standards Advisory Board (FASAB) reversed this guidance in 1998 through SFFAS No. 11, *Amendments to Accounting for Property, plant, and Equipment: Definitions*, which also replaced the definition of Federal Mission Property with "National Defense (ND) PP&E." SFFAS No. 11 changed the existing accounting guidance for space exploration equipment, and now required NASA to meet the SFFAS No. 6 General PP&E standards for tracking, recording and depreciating historical costs for each individual asset. However, NASA's processes and long-standing contracts for acquiring ISS and Space Shuttle assets were established to comply with Federal Mission PP&E requirements, not General PP&E. These practices rely on contractors to report the balances of contractor-held property, in accordance with guidelines set forth in the NASA FAR Supplement.

NASA has introduced compensating controls, introduced new accounting policies, revised accounting processes, increased the frequency and improved the quality of contractor property reporting, and implemented new property accounting systems to improve its accounting for the Agency's PP&E and to provide program management with the necessary information to support programmatic decision making. However, since NASA does not have the documentation required to support its space exploration asset balances under General PP&E standards and since there are no comparable assets with which to establish a reasonable balance, the auditors have continued to report a material weakness related to controls over legacy PP&E and disclaimed audit opinions.

Both the ISS and Space Shuttle are scheduled for retirement in this decade. Continuing depreciation of these space exploration assets is bringing the net asset balances on the balance sheet to levels that will become immaterial to the financial statements. The Shuttle assets are being depreciated through their expected useful life based on their current schedule for retirement in 2010, and the International Space Station is being depreciated based upon a 15-year specification life, through 2016, which would not change, in accordance with accounting requirements, if the ISS is extended beyond this period. While the International Space Station depreciation schedule naturally leads to 2016 as an outside date for resolution of this PP&E issue, NASA has been working to achieve a timelier, albeit still cost efficient and effective, solution for this issue.

**Legacy PP&E Improvements**

In FY 2007, NASA obtained guidance from the FASAB's Accounting and Auditing Policy Committee (AAPC) to reclassify certain space exploration assets as research and development expenses, per Financial Accounting Standard No. 2, *Accounting for Research and Development Cost*. In addition to more appropriately classifying the costs for these assets, this also focused the legacy property issue to primarily the ISS and Space Shuttle assets.

Also in 2007, NASA implemented a new policy and related procedures for identifying the cost of individual assets throughout such assets' acquisition lifecycle, consistent with SFFAS No. 6. The procedural changes facilitate the identification, verification and reconciliation of asset values for assets created or developed under

contracts awarded after implementation of the revised policy and to certain large pre-existing contracts.

Additionally, during FY 2008, the Agency implemented a new asset management module within its core financial management system. This module integrates personal property equipment data with the core financial accounting system, addressing a key part of the prior year's material weakness and a noted noncompliance with FFMIA. This module provides: (1) more accurate, timely recording and valuation of PP&E; (2) improved valuation, capitalization, and depreciation processes; (3) improved audit trail of capitalized PP&E; (4) greater standardization of property management processes; and (5) elimination of many manual processes.

In FY 2009, NASA performed a review of the processes used to track, validate and record costs for the ISS and Space Shuttle. This review resulted in changes to NASA's capitalization policies for Space Shuttle launch costs and for ISS Integration and Operations costs. Following this review, NASA recorded a subsequent downward adjustment to the net book value of the ISS.

The review also supported NASA's preparation for the release of SFFAS No. 35, *Estimating the Historical Cost of General Property, Plant, & Equipment: Amending Statements of Federal Financial Accounting Standards 6 and 23* on October 14, 2009. This standard is intended to provide entities, like NASA, who have significant investments in assets but, at the time these assets were acquired, did not have adequate controls or systems in place to capture historical PP&E costs, with a cost effective method for complying with Federal property accounting standards.

#### **NASA Planned Corrective Actions**

1. As recommended by the independent auditor, NASA will adopt SFFAS No. 35 to establish auditable values for those legacy assets—including NASA's space exploration PP&E, particularly the ISS and Space Shuttle—for which the Agency does not have the necessary historical cost records or for which it would not be cost effective to recreate such records. SFFAS No. 35 amends existing accounting standards to clarify that reasonable methods of estimating historical cost and accumulated depreciation may be used to value general property, plant, and equipment. As FASAB notes in the standard, use of estimates is a more cost-effective means of valuing certain assets than reconstructing actual historical amounts based on inadequate or nonexistent accounting records.

The adoption of SFFAS No. 35 requires NASA management to identify and adopt a basis for determining reasonable estimates of historical cost information. Implementation of the standard will require collaboration between the Agency and its auditor on the basis for the reasonable estimate, the approach for implementing that basis, the information required to support the resulting estimates, and the timeframe within which the estimates can be generated. Working through a process for implementing SFFAS No. 35 is a challenge for the Agency that may impact NASA's approach and timeline for resolving the legacy PP&E weakness. SFFAS No. 35 provides NASA with a way forward, but it is not a pre-defined solution to the Agency's one remaining material weakness.

2. NASA will also continue to identify key PP&E control activities as a part of the Agency's ongoing Continuous Monitoring Program (CMP). The CMP is a monthly process that provides for robust and rigorous reviews to validate the quality and sufficiency of information for key accounts and accounting transactions. Changes in key processes, like those associated with the valuation of legacy PP&E, will be accompanied by reviews and, if required, improvements in the related CMP control activities.

3. Additionally, NASA will integrate its real property assets, which comprise 8 percent of NASA's total asset value, into the core financial system's asset management module in FY 2010. This will improve overall PP&E accounting, and will address a specific FFMIA weakness identified in the auditor's Report on Internal Control.

#### **Conclusion**

In closing, NASA has taken clear and positive steps toward resolving its financial management weaknesses. Today, using current systems and processes, NASA is able to track and control its funds, account for the costs related to individual programs and projects, and manage the Agency's day-to-day operations. The Agency remains committed to resolving the legacy property weaknesses, particularly through the guidance contained in the recently released SFFAS No. 35. Combined with the Agency's rigorous on-going control reviews and the introduction of additional system

capabilities, we expect our efforts will result in a more acceptable audit outcome and opinion.

Chairman Miller and Chairwoman Giffords, I would be pleased to respond to any questions that you or the other Members of the Subcommittees may have.

Summary of Material Weaknesses During the Past Eight Years

Material Weakness	FY 2002 Unqualified (PwC)	FY2003 Disclaimer (PwC)	FY2004 Disclaimer (EY)	FY2005 Disclaimer (EY)	FY2006 Disclaimer (EY)	FY2007 Disclaimer (EY)	FY2008 Disclaimer (EY)	FY 2009 Disclaimer (EY)
Property, Plant, and Equipment- Legacy Assets (PP&E)	X	X	X	X	X	X	X	X
Financial Stmt. Preparation Identified as part of FSAO FY04	X	X						
Lack sufficient audit trail		X						
Fund Balance with Treasury (FBWT) Rolled into FSAO FY06		X	X	X				
Financial, Systems, Analyses, and Oversight (FSAO) *			X	X	X	X	X	
IFMP (SAP) control environment			X					

\* Aspects related to Unfunded Environmental Liability (UEL) and FFMA compliance reported as significant deficiencies in FY 2009.

Chairman MILLER. Thank you, Dr. Robinson. We will now have questions, the first round and maybe our only round. I now recognize myself for 5 minutes.

Mr. Murrin and Dr. Robinson mentioned that FASAB has now issued guidance for how to value legacy assets. Obviously NASA is not the only agency that has a problem like this. The Defense Department is the other obvious example, although there might be willing buyers for some of what the Defense Department has. They are not necessarily anyone that we want to sell that stuff to. Have you looked at those standards? Do they seem workable? Would they get NASA in compliance?

Mr. MURRIN. Well, the standards themselves are really quite brief and provide really a summary of how to do it. It is really the devil is going to be in the details of how NASA, DoD and the other agencies work together to come up with what reasonable approaches are. I think that Dr. Robinson had the right track of just saying the agencies and their auditors are going to need to work together to really cooperate to really figure out what is enough. We don't want to over-expend resources in pursuit of this and getting down to minute detail, particularly since FASAB has spoken on this issue. But there is not a cookbook as yet to implement the standard. The standard really became effective in October. So we don't have a series of agencies that have actually implemented it as yet.

Chairman MILLER. Have you taken even a preliminary look at, or do you have the data, the information, upon which to take a preliminary look at how the FASAB standards—what valuation they might lead to with respect to the Space Shuttle and the Space Station?

Mr. MURRIN. Well, the agency actually has done that. They have a series of materials that were pulled together in the summer of 2009 that were intended to develop an estimate under that new standard were the standard applicable in 2009. We have begun our process along with the Office of Inspector General to look at that information and how it might apply for 2010.

Chairman MILLER. Okay. Mr. Martin, obviously all of you have a great desire to get this worked out and you want to maintain the independence of your auditor, but it does appear that one approach to the immediate problem might be to ask the auditor to kind of revise or take a second look at this year's valuations based on the new FASAB standards. Have you considered doing that? Is that something you might do?

Mr. MARTIN. I would have to actually speak with Dan and with Tom, but I think we have just kicked off the fiscal year 2010 audit review, and I am not sure if they have gotten to that level of detail yet. That is certainly one approach that we can look into at the outset.

Chairman MILLER. Okay. Mr. Murrin, with the benefit now of the FASAB guidance for legacy assets, do you feel reasonably confident that next year's audit will not have a qualification to it, will not have an asterisk? It will be a clean audit, or can it be?

Mr. MURRIN. Yes, somewhat regrettably I get that kind of a question just about every year from every client at one point or another, and we really can't prejudge what the outcome of a par-

ticular year's audit process is. I would say that the situation here, where FASAB has developed a document that should be helpful to NASA in assisting and resolving this, and FASAB developed that document at least with NASA and DoD and some of these other entities in mind as they developed the standard certainly is a helpful thing that should help in this process. But I can't prejudge the answer for it.

Chairman MILLER. Okay. Perhaps you should have—you missed your calling. Perhaps you should have become a lawyer. Your answer I think was, it depends. But perhaps that is an accountant's ultimate answer for everything as well.

But with respect with these specific problems, assuming that there are no new problems, does applying the new FASAB guidance with presumed cooperation, does that give you confidence that whatever new problems may arise, that problem can be solved?

Mr. MURRIN. The two recommendations we have which were reasonably specific in providing a roadmap on how one might apply the FASAB 35 guidance in addressing some of the contractor-held property issues, you know, those recommendations I think do provide a roadmap. And if NASA, cooperatively working together with us sort of talks through what we have in mind there, I think there are certainly opportunities for them to have an improved outcome.

Chairman MILLER. Okay. So the answer is, it still depends. My time is expired. I now recognize Dr. Broun for 5 minutes.

Mr. BROUN. Thank you, Mr. Chairman. I would like to ask the panel, are there any risks to using estimates or any impediments to using estimates instead of real numbers for determining legacy asset value? We will start with Mr. Murrin and then Dr. Robinson and anybody else that wants to pipe in.

Mr. MURRIN. Yeah, I think in the context of NASA's operations and the items that we are principally speaking about, legacy assets, the Shuttle and the Space Station, relatively less risks involved in that. Do we really need to know exactly what the invoiced amounts were versus having, you know, range of estimates that is a reasonable estimate for those assets? Depending on the assets that you have, I think there may be more of a risk involved in developing and using estimates, but certainly for the two particular assets that are most of the focus of this, relatively less.

Mr. BROUN. Impediments to making an estimate, reasons, picking a number, et cetera? Just try to get something that Dr. Robinson can work with and that you can work with in the future?

Mr. MURRIN. Probably the principal impediment is that the first shot at the estimate is going to be the recorded amounts because those are the amounts that were recorded in the records over the years. But unfortunately, the records to support the amounts that went into the estimates are not available anymore, either. So is the estimate based on a number that was not supported any better than the number that was not originally supported just because now you can call it an estimate. So that would be the impediment. So I think that is where if you look at our recommendation, we are really looking for whether there are things that can corroborate the amount that has been recorded, whether it is the amount that was budgeted in each of those years that can somehow get compared to what got capitalized or some other second item that can help cor-

roborate it so that we are not just saying, well, now it is an estimate. We don't really have to audit it because that is not really what happens. We do still have to audit it.

Mr. BROUN. So from what I am gathering from what you are telling us is that basically there is no other way to truly clear this up until we retire the assets, is that correct?

Mr. MURRIN. Well, I don't think so, I think the estimation process does hold some promise and certainly FASAB speaking on this matter and reinforcing that estimates are acceptable, you know, gives some comfort to say that FASAB is not looking for an exact number here for these assets. Certainly retiring them would definitively resolve it, but short of that, you know, it is possible to get some corroborating evidence to say that the amounts that are there are reasonable.

Mr. BROUN. Dr. Robinson?

Ms. ROBINSON. I agree with what Mr. Murrin said. The one thing I would add here is that in the course of this long trial on constructing the station and trying to record the costs, we also had a change in auditor. And so one of the numbers that we are talking about was actually approved in our previous audit, the one where we had a clean opinion. And so they did do an evaluation and came up with a number, and we have been relying on that as our previous auditors.

But as Mr. Murrin points out, a lot of the documentation and other things were with them, and now they are no longer our auditors. So this tale has gone for so many years that there are so many twists and turns that it is really hard to nail down every single one.

On the other hand, the Shuttle and Station are things. We are trying to value an asset. It may not have a market value, but the components are identifiable and recognizable. And so there certainly is an ability to be sure that we have it about right. And so I think it is not just that we look at the invoice cost but we can also look at what has been built and make sure that we are in the right ballpark.

Mr. BROUN. All right. Mr. Chairman, my time is about expired, so I will yield back. Thank you, sir.

Chairman MILLER. Thank you. I now recognize the other Chair, Ms. Giffords, for 5 minutes.

Ms. GIFFORDS. Thank you, Mr. Chairman. Dr. Robinson and Mr. Martin, obviously a financial management system should tell us how much money NASA has, it should tell us where the money is flowing in and how the money is being spent. With the system right now, can we get those answers and can we trust them?

Ms. ROBINSON. Yes.

Ms. GIFFORDS. Mr. Martin?

Mr. MARTIN. I believe so on a day-to-day basis, yes.

Ms. GIFFORDS. Mr. Howard?

Mr. HOWARD. Yes, ma'am, you can.

Ms. GIFFORDS. And Mr. Murrin, do you believe that NASA's in a position now that is able to answer those questions?

Mr. MURRIN. You know, unfortunately, I get to do the lawyerly thing. We do end up having to speak as a firm through our reports and the public documents, and to the extent that we are dis-

claiming opinion that is because under the professional standards given the size of the PP&E matter, we are not in a position to give a piecemeal opinion and opine on the rest of the financial statements. And therefore, really, I am not in a position to answer that definitively.

Ms. GIFFORDS. Thank you. You know, the past is the past, and we have obviously spent some time talking about where the agency has come from and where we are today. We have spent some years trying to get some answers to the value of Space Shuttle and the International Space Station, and a lot of it goes back to the accounting system of the 1970's and the 1980's and how it didn't exactly capture the actual cost information called for by government accounting rules.

Are we in better shape to meet those accounting requirements for the assets that NASA has today and is currently developing?

Ms. ROBINSON. I think so. It is now standard practice in our contracts to require the accounting information that we need, and we don't anticipate problems going forward, beyond the fact that many of these systems are very large and are just difficult to value in terms of the entire numbers. But we will have the data in order to do it.

Ms. GIFFORDS. Dr. Robinson, what assurances can you give to Members of Congress that this is actually going to take place and that we can know that—we can take this information and be very satisfied that we are getting the correct information?

Ms. ROBINSON. I think that NASA, even over the last couple of years, has demonstrated that it can produce auditable financial transactions, can appreciate assets and expense its contracts and grants according to guidance. We do not believe that there are large problems, and I think our contractors would agree with that. They have felt the burden of giving us all of the data and have worked very closely with us to make sure it is the right data and what we need. So the proof will always be in the pudding. We are going to be audited every year, so we will see. But we feel like we are on a strong footing.

Ms. GIFFORDS. And are there benchmarks that we should look for here in the Congress?

Ms. ROBINSON. When you look at the financial data, when you talk about money at NASA, you talk about the financial reports, but you are also talking about the budgetary estimates and you are talking about the program cost and schedule estimates. And all of that data goes into real confidence about whether or not an entity has control of its day-to-day operations. It is not just the financial transactions.

And so I think there has been a lot of work that has been done by the IG's office and by others and very much so within NASA to try to beef up all of those parts of the financial enterprise, in particular to improve our joint cost and schedule estimates to baseline programs and hold them accountable for that. And so I think we have seen improvements that have been across the board on all aspects of money at NASA.

Ms. GIFFORDS. Mr. Martin, would you care to comment?

Mr. MARTIN. To your specific point on assets, at the beginning of fiscal year 2008, NASA implemented a new system for all other as-

sets that it is acquiring besides the Shuttle and the Station. We have taken a look at that, Ernst & Young has taken a look at it. We think it positions the agency to be able to accurately report the value of assets going forward.

Ms. GIFFORDS. Thank you. Mr. Chairman, I see I am almost out of time. I appreciate the time. Thank you.

Chairman MILLER. Thank you. Ms. Giffords yields back. Mr. Olson is recognized for 5 minutes.

Mr. OLSON. Well, thank you very much, Mr. Chairman, and I would like to talk a little bit and ask questions about legacy systems, probably directed to Mr. Martin and Dr. Robinson. But anybody, if you want to chime in and give an answer, feel free to do so.

With regard to the material weaknesses in NASA's controls for assuring that the value of legacy property, plant and equipment, notably the Space Shuttle and the ISS, is fairly stated, all of you have testified that the upcoming retirement of the Shuttle and the write-off of the Space Station will largely resolve the problem. Are there other, albeit smaller, legacy issues that are still haunting NASA, and if so, how can they be dealt with. Dr. Robinson?

Ms. ROBINSON. Well, I am going to plead a little ignorance here since I have only been on the job for 3 weeks, but I have asked those questions about what are the kinds of things coming down the road. And really, in terms of our portfolio of assets, the Shuttle and Station are even different among that very unique set. We have a lot of highly specialized research satellites and other things which don't trigger these kinds of requirements. They are much more simple from an accounting perspective.

And so I don't see it, but on the other hand, I have only been here 3 weeks. So I haven't learned everything.

Mr. OLSON. Mr. Howard, I don't want to take your—kind of read something into your actions there, Mr. Martin. It looks like, Mr. Howard, you want to say something?

Mr. MARTIN. My legacy goes back 3 days, so I am going to look to Tom.

Mr. OLSON. Thank you. Mr. Howard?

Mr. HOWARD. The two assets that we talked about are the principal ones, and there may be some others that are associated with the contractors who are building things and some of the property that has happened. But for the most part, the focus is on the Shuttle and the International Space Station. And if the agency can get those resolved, that is the bulk of the problem.

Mr. OLSON. Thank you very much for that answer. And another question just involving the costs to NASA of compliance. The past 20 years, how much money has NASA spent to bring it into compliance with Federal accounting standards? Is that you, Mr. Howard, again?

Mr. HOWARD. I would have to defer to the agency for an accurate answer on that.

Ms. ROBINSON. We will take that question for the record, but I will tell you, it is a not-insignificant sum, and that would be true for all agencies as they have built financial systems.

Mr. OLSON. Thanks for that answer. You kind of read my mind there, and I appreciate a statement for the record.

Looking ahead, what is your assessment about the cost curve for NASA to sustain this effort? Do you think the agency needs to continue heavily investing or is it at a point now where growth in spending on financial management systems and personnel can begin to flatten out?

Mr. HOWARD. From our perspective, I would say it is the latter, that the agency has been implementing this current system for 7 years now, and it is at the point where it is working effectively. So we should be at a point where it can begin to flatten out.

Ms. ROBINSON. I would say that we have some milestones coming up where we will be integrating our real property systems. So we still have a number of things, but albeit in the near future, not the long future. And then of course, then we have to maintain quite a lot of vigilance. No system is going to produce great numbers. People have to create great numbers to put in the system. So we will have to continue that.

Mr. OLSON. Dr. Robinson, thank you for that answer. Mr. Howard, thank you. Mr. Martin, thank you for your time. Mr. Murrin, thank you. I greatly appreciate everything, and I know coming up here after a couple, 3 weeks and 4 days, I really, really appreciate you coming here and testifying today. Thank you very much. I yield back my time.

Chairman MILLER. Thank you, Ms. Olson. By far the most conscientious member of the I&O Subcommittee, Ms. Dahlkemper is recognized for 5 minutes.

Ms. DAHLKEMPER. Well, thank you for that endorsement, Mr. Chairman. Thank you, our witnesses, for being here today.

Chairman Miller in the beginning said that we don't want to return next year with the same material weakness, and I would just like to extend his remarks by saying that I don't want to come back here next year and find we have new material weakness.

Mr. Murrin, you noted in a report that NASA wasn't able to provide its estimates for environmental liability costs with sufficient time to support the audit process. Am I right in reading this to say that we don't have the same depth of understanding on this problem that we do on material weakness we have been discussing?

Mr. MURRIN. I actually do think that the record for last year shows some progress by the agency and their environmental liabilities. To some extent it was work that was done at the last minute to get a comment behind them. So a lot of things were done in, you know, July, August, September, literally getting some things to us the last week in September to be able to say, well, we have a balance now. Here it is. Unfortunately, in a multi-billion dollar entity, getting a number on the last day of the year is not sufficient time in which to actually go in and have the firm develop the work that we would need to do to stand behind that number as well and opine on that number. So it is a situation in which we think that if they work through the four recommendations we have there, they should be able to make continued progress as well and get to the point where we are not talking about those numbers being materially misstated and are in a position to think anyway that if not a material weakness, perhaps no longer a significant deficiency, that they certainly constituted a significant deficiency this year.

Ms. DAHLKEMPER. Thank you for that. Given the severe time constraints and resource limitations, you mentioned in your testimony, should our committee be confident that \$922 million is a well-grounded estimate of NASA's environmental liabilities?

Mr. MURRIN. Well, we don't as a firm opinion on individual elements of the financial statements, but the comment that we are making about the significant deficiency for environmental liability is an indicator that we think that more work by the agency can be done around its environmental liabilities, and it wouldn't be entirely surprising to have that number move as the agency further refines its process for estimating environmental liabilities. And we do our audit work around those estimates to verify whether they are appropriate or not.

Ms. DAHLKEMPER. Okay. Dr. Robinson, your testimony doesn't describe steps to deal with the incomplete training for staff working on the liability estimates or the fixes needed in estimating software described in their Ernst & Young reports. Can you describe for us what kind of corrective actions you will be pursuing on that?

Ms. ROBINSON. Well, incorporation with the Environmental Management Office at NASA, I think there is a real commitment there to train the staff, to improve their estimates. If you look across government at agencies trying to deal with environmental liabilities, there are a few who have very different liabilities than others. DoE and NASA particularly have nuclear liabilities. We have DoD and we have a lot that are associated with fuel and operating systems. And so I think there has just been a lot of effort over the last 10 years to try to develop acceptable methodologies and models to do that. This is not just work that is going on at NASA. It is going on everywhere to try to perfect these estimates. And so I do think our Environmental Management Office is very keen in producing the best ones possible.

And then in the Federal Government, you report it many times. You report for the budget, you report for financial report for all that, and getting every office in a large agency like NASA to produce numbers at the right time, it is a big effort. And so I do think the Environmental Management Office and NASA as a whole is there now, and we do expect to get much more timely information from them.

Ms. DAHLKEMPER. So you expect that you will be able to do that, you will be able to get the corrective actions done that you need to?

Ms. ROBINSON. Um-hum. Definitely.

Ms. DAHLKEMPER. Okay. Well, I just want to close by reiterating, you know, what Chairman Miller has said, and I just hope that NASA gets its financial accounting system into the best shape possible, that we want transparency. And I look forward to not having to have this discussion next year. So thank you very much for your time. I yield back.

Chairman MILLER. Thank you, Ms. Dahlkemper. That ends the questioning. I don't think we will have a second round, but the staff points out I needed a clearer answer to one of my earlier questions. I think one extension of southern politeness has a tendency toward indirection. We also have the highest murder rate in the Nation, so sometimes it doesn't work as well.

Mr. Martin, will you ask Ernst & Young, your auditor, to apply the new FASAB guidance for valuing legacy assets for 2009 for the Space Shuttle and the Space Station, the significant assets that calls the qualified the not-clean audit? It is obviously work you are going to have to do again next year. I understand Mr. Murrin doesn't want to commit to what kind of audit he will give, what kind of report he will give next year. But will you ask them to look at those assets again and work with all the folks that you need to work with to apply the new guidance to try to come up with an acceptable valuation for those assets?

Mr. MARTIN. We will certainly work hand-in-glove with NASA and with Ernst & Young. But Tom, correct me if I am wrong, I think the burden is on Dr. Robinson in her shop to do the initial estimations, again, working with the accounting firm and with the OIG.

Chairman MILLER. Okay.

Mr. MARTIN. We certainly pledge to work together toward that end.

Chairman MILLER. Well, it is not entirely clear exactly who has got to ask who to do what. But Mr. Howard, Mr. Martin, will you tell Ms. Robinson what she needs to know? Ms. Robinson, will you commit—

Ms. ROBINSON. Again, before I got there, the agency I think did yeoman's work to try to make all the adjustments in the 2009. So we believe we have done it, and we are ready to be evaluated.

Chairman MILLER. For 2009?

Ms. ROBINSON. We are ready to be evaluated for the new estimation methodology, and all the adjustments have been made already to the legacy assets. And so we could start now to value them under the new FASAB standard and work on that in the next couple months.

Chairman MILLER. Will everyone here commit to do that? Mr. Martin? Mr. Howard?

Mr. HOWARD. Yes, sir. We have, and as Dr. Robinson said, the agency began the process last year. Ernst & Young is going to take a look at that as part of the 2010 audit. The Office of Inspector General is going to take a look at it as part of the 2010 audit. We are not asking them to go back and revisit the 2009. The standard was approved in October of 2009. It is not retroactive to fiscal year 2009. So we are applying it to fiscal year 2010.

Chairman MILLER. But you didn't pass your grade. You got held back.

Mr. HOWARD. Right.

Chairman MILLER. Think of this as summer school. Will you ask them—provide all the information necessary, ask them to value the assets based upon the FASAB guidance that you now have, even though the books are now closed. That is obviously work you will have to do again for the 2010 audit. I know the books are closed. I know that the audit is in, but do it anyway. Will you do it anyway?

Mr. HOWARD. No, sir, not for 2009. We are focused on 2010 now and going forward.

Chairman MILLER. Ms. Robinson?

Ms. ROBINSON. I think the distinction here is that these are legacy assets. And so the valuations and the corrections to them are—they don't change every year. And so I think the issue here is—what I think the Chairman is asking is can we get an early read so that we don't wait until the end of the audit so that in the next couple of months we get a read on whether or not we have made all the appropriate adjustments so that—and if we haven't, we can then work on it, but we are not going to wait until next fall to know whether or not we have to come back up here.

Chairman MILLER. What she said.

Mr. HOWARD. Yes, we have already talked, Mr. Murrin and myself, and Dr. Robinson's Deputy, Mr. Bowie, have talked about doing exactly that, sitting down, looking at what the agency has done to date, having a good discussion about what is good about it and what can be improved about it and making specific recommendations so that the adjustments can be made timely if there needs to be additional adjustments.

Chairman MILLER. Okay. That sounds like as close a commitment as we are going to get. And with that, before bringing the hearing to a close, I want to thank all of our witnesses for testifying before our Subcommittee today. Under the rules of the Committee, the record will remain open for 2 weeks for additional statements from the members for answers to any follow-up questions the Subcommittees may have for the witnesses. The witnesses are excused. The hearing is now adjourned.

[Whereupon, at 3:50 p.m., the Subcommittees were adjourned.]