

National Aeronautics and Space Administration



# Agency Financial Report



FISCAL YEAR 2007

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*An Addendum to this Agency Financial Report, published both in the CD-ROM accompanying this report and online at [www.nasa.gov/about/budget/index.html](http://www.nasa.gov/about/budget/index.html), provides detailed financial information including the FY 2007 financial statements and other accompanying information on NASA’s FY 2007 performance.*

## Letter from the Administrator

November 15, 2007

FY 2007 was another good year for NASA. We made significant progress in implementing our Strategic Plan's challenging Mission of space exploration, scientific discovery, and aeronautics research. In support of this Mission, NASA also made noteworthy improvements to the financial and performance reporting systems we use to allocate resources for maximum return on the Nation's investment in civil space and aeronautics research activities.

Consistent with our Strategic Goals, we continued to fly the Shuttle safely and made strides toward completing the International Space Station, in particular by augmenting the Station's capabilities to support a larger on-orbit crew and longer missions. We are making progress developing a new Crew Exploration Vehicle to replace the Shuttle and establishing a lunar return program upon which to base the Nation's further human exploration of the solar system and beyond. We fostered appropriate partnerships with the emerging commercial space sector, particularly in the space launch and space transportation services areas. While redirecting NASA's human spaceflight program to focus on exploration, we maintained a balanced overall program of science, exploration, and aeronautics, including successful tests of the X-48B aircraft to pave the way to quieter, cleaner, more fuel-efficient air travel; innovations in interpreting satellite data to determine ice coverage and its sea level impacts; successful launches of robotic spacecraft to better identify Sun-Earth interactions; discovery of Earth-like atmospheric features elsewhere in our solar system; and insights into how the distribution of dark matter in space provides clues to billions of years of the universe's history.

To report our FY 2007 program and financial activities, NASA has chosen to participate in the Office of Management and Budget's FY 2007 Performance and Accountability Report (PAR) pilot program which entails producing an alternative to the consolidated annual PAR. Accordingly, this report is the Agency Financial Report (AFR), which includes financial and performance highlights; a separate Annual Performance Report will be issued later in conjunction with release of the President's Budget.

NASA accepts responsibility for accounting for our financial and performance data accurately, reliably, and with the same attention to detail as we devote to our scientific and technical research. With this in mind, I can provide reasonable assurance that the performance data in this report is complete and reliable. Any data limitations are documented explicitly.

We continue to make major progress in the financial management arena. In FY 2007, we improved how we account for Property, Plant and Equipment (PP&E) in order to more closely align our accounting policies with our program and project practices. We made substantial progress in our ability to prepare financial statements compliant with Federal accounting standards. Notwithstanding this progress, due to the existing material weaknesses in financial systems, analyses, and oversight and asset management, I cannot provide reasonable assurance that this report's financial data is entirely complete and reliable. We will continue to focus on resolving these weaknesses. This effort, along with Agency efforts to address the material weakness in IT Security, is addressed in the Statement of Assurance section of this report.

There is considerable work still to do on the path ahead, but NASA's commitment to achieving our goals is unwavering, our progress is steady, and our enthusiasm is strong. Therefore, it is my pleasure to submit NASA's FY 2007 Agency Financial Report.



Michael D. Griffin  
Administrator

# MANAGEMENT DISCUSSION AND ANALYSIS

**Note on Participation in the Performance and Accountability Report (PAR) Pilot:** NASA has chosen to participate in the FY 2007 Performance and Accountability Report (PAR) pilot pursuant to Office of Management and Budget (OMB) Circular A-136. This pilot entails producing an alternative to the consolidated PAR. The alternative includes three parts: this Agency Financial Report (AFR); an Annual Performance Report (APR) to be issued with the FY 2009 performance plan and FY 2009 Congressional Budget Request February 4, 2008; and a "Highlights" document to be issued February 1, 2008. The AFR, APR, Congressional Budget Request, and "Highlights" document will be available on NASA's Web site at [www.nasa.gov/about/budget/index.html](http://www.nasa.gov/about/budget/index.html) on their release dates.

## NASA's Mission, Strategic Goals, and Organization

Congress enacted the *National Aeronautics and Space Act of 1958* to provide for research into problems of flight within and outside Earth's atmosphere and to ensure that the United States conducts activities in space devoted to peaceful purposes for the benefit of mankind. As we begin to celebrate our 50<sup>th</sup> anniversary, NASA continues the American traditions of pioneering, exploration and discovery by using NASA's unique competencies in science and engineering to achieve NASA's Mission:

To pioneer the future in space exploration, scientific discovery,  
and aeronautics research.

### NASA's Strategic Goals

On January 14, 2004, President George W. Bush announced a Renewed Spirit of Discovery: The President's Vision for U.S. Space Exploration, which Congress endorsed in the NASA Authorization Act of 2005. This directive commits the Nation to a journey of exploring the solar system, returning the astronauts to the Moon in the next decade, then venturing to Mars and beyond. To achieve this directive, NASA established six strategic goals:

1. Fly the Shuttle as safely as possible until its retirement, not later than 2010.
2. Complete the International Space Station in a manner consistent with NASA's International Partner commitments and the needs of human exploration.
3. Develop a balanced overall program of science, exploration, and aeronautics consistent with the redirection of the human spaceflight program to focus on exploration.
  - A. Study Earth from space to advance scientific understanding and meet societal needs.
  - B. Understand the Sun and its effects on Earth and the solar system.
  - C. Advance scientific knowledge of the origin and history of the solar system, the potential for life elsewhere, and the hazards and resources present as humans explore space.
  - D. Discover the origin, structure, evolution, and destiny of the universe, and search for Earth-like planets.
  - E. Advance knowledge in the fundamental disciplines of aeronautics, and develop technologies for safer aircraft and higher capacity airspace systems.
  - F. Understand the effects of the space environment on human performance, and test new technologies and countermeasures for long-duration human space exploration.
4. Bring a new Crew Exploration Vehicle into service as soon as possible after Shuttle retirement.
5. Encourage the pursuit of appropriate partnerships with the emerging commercial space sector.
6. Establish a lunar return program having the maximum possible utility for later missions to Mars and other destinations.

## **NASA's Organization**

NASA is comprised of Headquarters in Washington D.C., nine field Centers located throughout the country, and the Jet Propulsion Laboratory (JPL), a Federally Funded Research and Development Center operated for NASA by the California Institute of Technology. NASA also partners with academia, the private sector, state and local governments, other Federal agencies, and international organizations to advance its mission.

**Headquarters** provides the Agency's top-level leadership. It is responsible for NASA's communications with the rest of the Administration and Congress and for high-level communications with other external entities. It leads and coordinates Agency-wide functions such as financial management, budgeting, legal counsel, and public affairs. By means of four Mission Directorates—Aeronautics Research, Science, Exploration Systems, and Space Operations—it provides centralized leadership for the exploration and research programs that form the heart of the NASA mission. These Mission Directorates lead and coordinate all program activities conducted at each field Center.

- The **Aeronautics Research Mission Directorate (ARMD)** conducts high-quality, innovative research that will lead to revolutionary concepts, technologies, and capabilities that enable radical change to both the airspace system and the aircraft that fly within it. At the same time, this Directorate ensures that its research continues to play a vital role in support of the Agency's space exploration missions.
- The **Exploration Systems Mission Directorate (ESMD)** develops systems and supports research and technology development to enable sustained and affordable human and robotic space exploration. This Directorate will develop the robotic precursor missions, human transportation elements, and life support systems for the near-term goal of lunar exploration.
- The **Science Mission Directorate (SMD)** conducts the scientific exploration of Earth, the Sun, the rest of the solar system, and the universe. Large, strategic missions are complemented by smaller, Principal Investigator-led missions, including ground-, air-, and space-based observatories, deep-space automated spacecraft, and planetary orbiters, landers, and surface rovers. This Directorate also develops increasingly refined instrumentation, spacecraft, and robotic techniques in pursuit of NASA's science goals.
- The **Space Operations Mission Directorate (SOMD)** directs spaceflight operations, space launches, and space communications and manages the operation of integrated systems in low Earth orbit and beyond, including the International Space Station. This Directorate also is laying the foundation for future missions to the Moon and Mars by using the International Space Station as an orbital outpost where astronauts can gather vital information that will enable safer and more capable systems for human explorers.

The **NASA Centers** and **JPL** conduct NASA's programs in exploration, discovery, and research. Led by the Mission Directorates at NASA Headquarters, each Center contributes unique capabilities to advance NASA's mission. The Centers are: Ames Research Center (Moffett Field, California), Dryden Flight Research Center (Edwards, California), Glenn Research Center (Cleveland, Ohio), Goddard Space Flight Center (Greenbelt, Maryland), Johnson Space Center (Houston, Texas), Kennedy Space Center (Merritt Island, Florida), Langley Research Center (Hampton, Virginia), Marshall Space Flight Center (Huntsville, Alabama), and Stennis Space Center (Bay St. Louis, Mississippi).

# Performance Overview

## *NASA's Program Performance*

NASA's program performance in FY 2007 was impressive, featuring significant progress in many areas of the Agency's mission of space exploration, scientific discovery, and aeronautics research. The year's program achievements are summarized in the "Performance Highlights" section below and will be discussed in detail in the FY 2007 Annual Performance Report (APR) to be issued with the FY 2009 Budget Request in February 2008. The following sections describe the purpose, assumptions, and methodology underlying the Agency's performance reporting on FY 2007.

## *Measuring NASA's Performance*

The Government Performance and Results Act of 1993 requires Federal agencies to issue plans for how they intend to spend budgeted resources and what they intend to achieve for this investment. NASA's most recent Strategic Plan, issued in 2006, sets forth the Mission and Goals shown at the beginning of this report. The annual Performance Plan, issued with the Agency's annual budget estimates, extends this plan to a more detailed level by establishing two levels of performance measures below the Strategic Goals: multi-year Outcomes and Annual Performance Goals (APGs). NASA managers calculate ratings for program performance for the multi-year Outcomes and APGs based on various factors including both internal and external assessments.

Internally, NASA monitors and analyzes each program's adherence to budgets, schedules, and key milestones. These analyses are provided during monthly reviews at the Center, Mission Directorate, and Agency levels to communicate the health of a program. (Programs are identified in NASA's annual Budget Estimates, available at [www.nasa.gov/about/budget/index.html](http://www.nasa.gov/about/budget/index.html).) Based on the analyses, managers formulate appropriate follow-up actions.

Externally, advisory groups such as the NASA Advisory Council, the National Research Council, and the Aerospace Safety Advisory Panel assess program content and direction. Also, experts from the science community review NASA's progress toward meeting the performance measures under Sub-goals 3A through 3D.

Based on the review results, NASA managers assess each program's progress toward meeting its assigned multi-year Outcomes and APGs. Multi-year Outcomes and their ratings for the past four years are listed in the Other Accompanying Information section in the Addendum to this report. Ratings for the APGs and detailed performance discussions will be provided in the APR, to be available at [www.nasa.gov/about/budget/index.html](http://www.nasa.gov/about/budget/index.html) on February 4, 2008.

## *Performance Highlights*

Below are highlights of NASA's FY 2007 accomplishments in pursuing the Agency's six Strategic Goals and the six Sub-goals under Strategic Goal 3, organized by NASA's lines of business led by each of the Mission Directorates.

### **Aeronautics Research**

**Sub-goal 3E: Advance knowledge in the fundamental disciplines of aeronautics, and develop technologies for safer aircraft and higher capacity airspace systems.**

NASA, in partnership with the Air Force Research Lab and Boeing Phantomworks, successfully completed flight experiments of the X-48B Blended Wing Body (BWB) advanced aircraft at NASA's Dryden Flight Research Center. The BWB is a hybrid configuration combining the best attributes of a conventional tube-and-wing aircraft with a flying wing. It has the potential to meet expected future Next Generation Air Transportation System requirements for low noise, low emissions, and high efficiency, with the added ability to land and take-off on shorter runways than current aircraft. The flight experiments conducted with the X-48B explored the low-speed aerodynamic performance and stability and control characteristics of this promising aircraft configuration. It is the first time a dynamically scaled BWB was flown. The experiments demonstrated the basic flying qualities of the X-

48B and the effectiveness of the on-board flight control system. For more, please visit [www.aeronautics.nasa.gov/releases/07\\_26\\_07\\_release.htm](http://www.aeronautics.nasa.gov/releases/07_26_07_release.htm).

## Exploration Systems

### **Sub-Goal 3F: Understand the effects of the space environment on human performance, and test new technologies and countermeasures for long-duration human space exploration.**

NASA completed the Human Research Program (HRP) Requirements Document that identified 33 human health and performance risks associated with human exploration missions. It establishes the requirements to ensure that investments are made in appropriate HRP projects and International Space Station (ISS) biomedical flight experiments to enable the delivery of countermeasures and technologies that satisfy exploration mission requirements.

NASA completed the final on-orbit operations of the Renal Stone study, which began during ISS Expedition 3 in 2001. The principal investigator is examining astronaut diet logs and urine collections from 20 subjects on several missions to test whether potassium citrate is an effective countermeasure against the formation of kidney stones while crewmembers are in orbit. The risk of kidney stones is elevated in space due to the mobilization of calcium from bone loss and the effects of microgravity on fluid distribution in the body.

### **Strategic Goal 4: Bring a new Crew Exploration Vehicle (CEV) into service as soon as possible after Shuttle retirement.**

The Constellation program is developing the next generation transportation systems to support the ISS and enable sustainable and affordable human exploration of the Moon and beyond. The Constellation program successfully completed the program Systems Requirements Review (SRR) and the Preliminary Program Approval Review (PPAR), a major programmatic milestone. PPAR approval gave the program authorization to proceed to the next phase of the life cycle, the Systems Definition Review (SDR) and the Program Approval Review (PAR). In addition, all major elements of Orion CEV and Ares I Crew Launch Vehicle (CLV) will be under contract by the end of 2007, bringing NASA closer to the Initial Operational Capability of the Orion in March 2015.

### **Strategic Goal 5: Encourage the pursuit of appropriate partnerships with the emerging commercial space sector.**

NASA's Commercial Orbital Transportation Services (COTS) projects made considerable progress towards encouraging the demonstration of an orbital capability to the ISS. In FY 2007, the two NASA partners with Funded Space Act Agreements—Space Exploration Technologies (SpaceX) and Rocketplane Kistler (RpK)—were joined by five new entrepreneurial space companies with unfunded Space Act Agreements—Constellation Services International, PlanetSpace, SpaceDev, SpaceHab, and Transformational Space (t/Space). One of the funded Partners, SpaceX, made considerable progress towards its goal of demonstrating an orbital capability by 2010.

### **Strategic Goal 6: Establish a lunar return program having the maximum possible utility for later missions to Mars and other destinations.**

The Lunar Crater Observation and Sensing Satellite (LCROSS) and the Lunar Reconnaissance Orbiter (LRO) missions are on schedule for a joint launch in late 2008. This mission is the first step toward returning humans to the moon. LCROSS will fly through the plume created by the impact of its Centaur upper stage in a permanently shadowed crater on the lunar surface to detect the presence of water ice. LRO will create a comprehensive atlas of the moon's topography to help NASA select safe landing sites, identify lunar resources, and study the radiation. To further the outpost establishment program, NASA scientists demonstrated a prototype technology, RESOLVE, which heated a small sample of the lunar regolith in the presence of hydrogen to form water. This type of in situ resource utilization will reduce the amount of consumables NASA would have to transport when establishing a lunar or Martian outpost.

## Science

### **Sub-goal 3A: Study Earth from space to advance scientific understanding and meet societal needs.**

Scientists at NASA's Goddard Space Flight Center and the University of Colorado have developed an innovative technique for using data from the GRACE mission to estimate, with unprecedented spatial detail, the growth and shrinkage of major drainage systems of the Greenland and Antarctic ice sheets. For Greenland, these results show significant ice loss in the southeastern section of the ice sheet, as well as modest losses elsewhere, while the interior has been growing. Between 2003 and 2005, the ice sheet lost 155 gigatonnes of ice per year in the areas below 2000 meters elevation (essentially the areas that experience melt), but those losses were partially offset by a gain of 54 gigatonnes per year at the higher elevations (above 2000 meters, where melt is very limited). The estimated net change in mass of 101 gigatonnes per year is equivalent of 0.3 millimeters per year of sea level rise. For additional information, please see <http://podaac.jpl.nasa.gov/grace/>.

### **Sub-goal 3B: Understand the Sun and its effects on Earth and the solar system.**

With the launches of Solar-B, STEREO, THEMIS, and AIM, NASA is embarking on a new campaign to explore the Sun's dynamics and understand and forecast its interactions with Earth. The new missions have revealed that the occurrence of polar mesospheric clouds is increasing; discovered previously unknown dynamic features in the Sun's coronal magnetic field; and observed that the processes that power the auroras progress faster than expected. These new missions are a major step in discovery in synergy with the Heliophysics Great Observatory constellation of satellites, mitigating potential risks to Sub-goal 3B noted in the FY 2006 PAR. For more, please see:

- Solar-B ([www.nasa.gov/mission\\_pages/solar-b/](http://www.nasa.gov/mission_pages/solar-b/))
- STEREO ([www.nasa.gov/mission\\_pages/STEREO/main/index.html](http://www.nasa.gov/mission_pages/STEREO/main/index.html))
- THEMIS ([www.nasa.gov/mission\\_pages/Themis/main/index.html](http://www.nasa.gov/mission_pages/Themis/main/index.html))
- AIM ([www.nasa.gov/mission\\_pages/aim/index.html](http://www.nasa.gov/mission_pages/aim/index.html))

### **Sub-goal 3C: Advance scientific knowledge of the origin and history of the solar system, the potential for life elsewhere, and the hazards and resources present as humans explore space.**

Cassini used its powerful radar to see through Titan's dense hazy atmosphere and obtain a clear image of lakes in the north polar region. The atmosphere is approximately two percent methane, similar to the percentage of water in Earth's atmosphere. At Titan's temperature, methane can exist as solid, liquid, or gas, just as water does on Earth, and the moon has methane clouds, rain, lakes, rivers, and erosion features. Titan also has a methanological cycle that acts like Earth's hydrological cycle. A picture (with caption) of methane lakes on Titan is available at [www.saturn.jpl.nasa.gov/multimedia/images/image-details.cfm?imageID=2432](http://www.saturn.jpl.nasa.gov/multimedia/images/image-details.cfm?imageID=2432).

### **Sub-goal 3D: Discover the origin, structure, evolution, and destiny of the universe, and search for Earth-like planets.**

Scientists used the Hubble Space Telescope, in combination with a world-wide suite of ground-based telescopes, to create a three-dimensional map showing the distribution of dark matter in the universe, providing the best evidence that normal matter, largely in the form of galaxies, accumulates along the densest concentrations of dark matter. The map reveals a loose network of filaments that grew over time and intersect in massive structures at the locations of clusters of galaxies. The map stretches halfway back to the beginning of the universe and shows how dark matter has grown increasingly "clumpy" as it collapses under gravity. Mapping dark matter's distribution in space and time is fundamental to understanding how galaxies grew and clustered over billions of years. For more, please go to [www.nasa.gov/home/hqnews/2007/jan/HQ\\_07002\\_Hubble\\_Dark\\_Matter.html](http://www.nasa.gov/home/hqnews/2007/jan/HQ_07002_Hubble_Dark_Matter.html).

## Space Operations

### **Strategic Goal 1: Fly the Shuttle as safely as possible until its retirement, not later than 2010.**

NASA launched three Shuttle missions to increase power for the ISS and maintain and resupply the orbiting complex. STS-116 (December 2006) delivered Sunita Williams to replace German astronaut Thomas Reiter, and



also delivered the P5 truss segment and supplies. The crew reconfigured the ISS power system and retracted the P6 solar array. STS-117 (June 2007), launched after NASA repaired damage caused by a February hailstorm, delivered astronaut Clayton Anderson, who replaced Williams. STS-117 also delivered the S3/S4 truss and supplies. The Shuttle and ISS crews deployed the solar arrays and radiators on the new truss, configured the ISS for activation of the Oxygen Generation System (OGS), and repaired a loose thermal blanket on the Shuttle's right Orbital Maneuvering System pod. STS-118 (August 2007) delivered supplies and the S5 truss, which the crew installed. The crew activated the Station–Shuttle Power Transfer System (SSPTS), which enables longer orbiter stays and more flexible ISS missions. STS-118 also was the first flight of Mission Specialist and teacher Barbara Morgan. More information on these flights can be found at [www.nasa.gov/mission\\_pages/shuttle/shuttlemissions/index.html](http://www.nasa.gov/mission_pages/shuttle/shuttlemissions/index.html).

**Strategic Goal 2: Complete the International Space Station (ISS) in a manner consistent with NASA's International Partner commitments and the needs of human exploration.**

NASA is on schedule to meet its commitments toward completing the ISS. In May and June 2007, ISS crew completed three extravehicular activities (EVAs) for maintenance, science, and assembly tasks. The newly installed S3/S4 truss increased the ISS's power capability, while the OGS rack, activated in July, will allow the ISS to accommodate a six-member crew and enable NASA to further develop and validate life-support technology for long-duration human space missions. The STS-118 crew attached the smaller S5 truss, which will enable the crew of a future mission (15A) to attach the next truss segment (S6), providing additional solar arrays. In August, the crew conducted three more EVAs for maintenance, science, and assembly tasks, including repair of the Carbon Dioxide Removal Assembly and activation of the SSPTS. Also, during the second EVA, crew successfully removed and replaced the Control Moment Gyroscope #3, restoring full Gyroscope capability to the ISS. Continued successful Space Shuttle and ISS missions will allow completion of ISS assembly by FY 2010. More information on ISS can be found at [www.nasa.gov/mission\\_pages/station/main/index.html](http://www.nasa.gov/mission_pages/station/main/index.html).

**Strategic Goal 3: Develop a balanced overall program of science, exploration, and aeronautics consistent with the redirection of the human spaceflight program to focus on exploration.**

NASA successfully launched five out of five NASA science missions in FY 2007: STEREO on a Delta II in October 2006; THEMIS on a Delta II in February 2007; AIM on a Pegasus XL in April; Phoenix on a Delta II in August; and Dawn on a Delta II Heavy in September.

**Strategic Goal 5: Encourage the pursuit of appropriate partnerships with the emerging commercial space sector.**

NASA completed an Agency strategic review of medium-sized expendable launch vehicle options, resulting in an effort to give significant attention to enabling the emerging launch provider community to become certified for NASA use. Policy changes needed to expedite the use of emerging providers have been reviewed and agreed to by the stakeholders. NASA's Ground Communications Network now obtains more than 50% of its spacecraft communications passes from non-NASA tracking stations, primarily in the commercial sector.

**Strategic Goal 6: Establish a lunar return program having the maximum possible utility for later missions to Mars and other destinations.**

A necessary element of the lunar return program being a robust communications capability, NASA developed plans to update the Space Communications Architecture, submitted them to the Committee on Science and Technology on July 25, 2007, and began aligning technologies to that architecture. In support of that architecture, NASA initiated acquisition of two replenishment Tracking and Data Relay Satellites (TDRS).

## Financial Overview

This section analyzes and discusses NASA's Financial Statements and the Agency's stewardship of the resources provided to it by Congress to carry out its mission. The Financial Statements, which describe the results of Agency operations and the Agency's financial position, are the responsibility of NASA's management. The Financial Statements, Notes, Required Supplementary Information, and Required Supplementary Stewardship Information are available in the Agency Financial Report Addendum at [www.nasa.gov/about/budget/index.html](http://www.nasa.gov/about/budget/index.html).

### *Limitations of the Financial Statements*

The principal statements have been prepared to report the financial position and results of operations of NASA pursuant to the requirements of 31 U.S.C. 3515(b). While the statements have been prepared from the books and records of NASA in accordance with generally accepted accounting principles for Federal entities and the formats prescribed by the Office of Management and Budget (OMB), the statements are in addition to the financial reports used to monitor and control budgetary resources which are prepared from the same books and records. The statements should be read with the realization that they are for a component of the U.S. Government, a sovereign entity.

### *Financial Highlights*

#### Results of Operations

The Agency's net cost of operations for FY 2007 was \$15.1 billion, a decrease of \$2.6 billion (14%) from FY 2006. The decrease did not reflect reduced expenditures on operations; rather, it was primarily due to (i) a \$2.9 billion reduction in depreciation expense in FY 2007 over FY 2006 resulting from a Change in Accounting Principle related to capitalization of PP&E which lowered the depreciable base of assets and (ii) a \$1.0 billion increase in net capital asset acquisitions not expensed. (See the Assets discussion in the section below for more information on the accounting change.)

Excluding the effect of decreased depreciation and the net increase in capital asset acquisitions, operating expenses increased by \$1.3 billion in FY 2007 over FY 2006. The overall Agency budget remained near FY 2006 levels because NASA operated under a Continuing Resolution for all of FY 2007. However, there were changes in costs among program activities as the Agency emphasized programs essential to achieving its strategic goals.

NASA's programs and activities are carried out through four Business Lines: Aeronautics Research, Exploration Systems, Science, and Space Operations. The Consolidated Statement of Net Costs presents the Agency's gross and net costs by Business Line as shown below. The net cost of operations is the gross (total) cost incurred by the Agency, less any earned revenue from other government organizations or from the public. Space Operations (including NASA's Shuttle and International Space Station programs), at \$6.1 billion, and Science, at \$5.1 billion, were the Agency's largest business lines in FY 2007. Exploration Systems net costs in FY 2007 grew by 22% to \$3.2 billion.

**Cost by Business Line**  
(Dollars in Millions)

	\$ Change	% Change	Unaudited 2007	Unaudited 2006 Restated
<b>Aeronautics Research</b>				
Gross Costs	\$ -429	-38%	\$ 700	\$ 1,129
Less: Earned Revenue	<u>27</u>	34%	<u>106</u>	<u>79</u>
Net Cost	<b>-456</b>	<b>-43%</b>	<b>594</b>	<b>1,050</b>
<b>Exploration Systems</b>				
Gross Costs	515	19%	3,217	2,702
Less: Earned Revenue	<u>-59</u>	-67%	<u>29</u>	<u>88</u>
Net Cost	<b>574</b>	<b>22%</b>	<b>3,188</b>	<b>2,614</b>
<b>Science</b>				
Gross Costs	-1,119	-17%	5,506	6,625
Less: Earned Revenue	<u>4</u>	1%	<u>352</u>	<u>348</u>
Net Cost	<b>-1,123</b>	<b>-18%</b>	<b>5,154</b>	<b>6,277</b>
<b>Space Operations</b>				
Gross Costs	-1,674	-21%	6,443	8,117
Less: Earned Revenue	<u>-123</u>	-29%	<u>301</u>	<u>424</u>
Net Cost	<b>-1,551</b>	<b>-20%</b>	<b>6,142</b>	<b>7,693</b>
<b>Net Cost of Operations</b>				
Gross Costs	-2,707	-15%	15,866	18,573
Less: Earned Revenue	<u>-151</u>	-16%	<u>788</u>	<u>939</u>
Net Cost	<b>\$ -2,556</b>	<b>-14%</b>	<b>\$ 15,078</b>	<b>\$ 17,634</b>

Source: AFR Addendum: Consolidated Statement of Net Cost, Unaudited

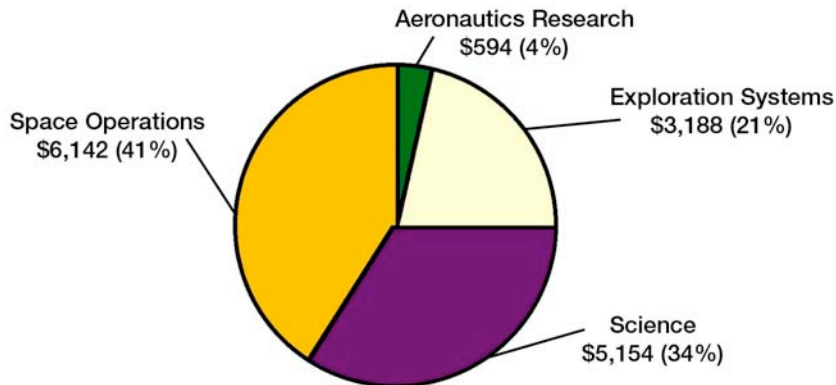
Aeronautics Research net costs decreased \$456 million in FY 2007. Expenses on operations grew by \$90 million while there were allocated reductions to expenses due to decreased depreciation of \$368 million, net increases in capital asset acquisitions of \$138 million, and residual administrative reductions of \$40 million. The reduction in depreciation expense across all operations resulted from application of the Change in Accounting Principle (discussed below in the Assets section) lowering NASA's depreciable base of assets in FY 2007 as previously capitalized R&D projects were expensed through a prior period adjustment.

Exploration Systems net costs increased \$574 million in FY 2007. Expenses on operations grew by \$1,277 million while there were allocated reductions to expenses due to decreased depreciation of \$596 million, net increases in capital asset acquisitions of \$213 million, and residual administrative increases of \$106 million. The increase in operations is the result of a significant increase in activities within the Constellation program, specifically for the Orion Crew Exploration Vehicle and the Ares I Crew Launch Vehicle.

Science net costs decreased \$1,123 million in FY 2007. Expenses on operations grew by \$100 million while there were allocated reductions to expenses due to decreased depreciation of \$765 million, net increases in capital asset acquisitions of \$273 million, and residual administrative reductions of \$185 million.

Space Operations net costs decreased \$1,551 million in FY 2007. Expenses on operations decreased by \$215 million while there were allocated reductions to expenses due to decreased depreciation of \$1,106 million, net increases in capital asset acquisitions of \$395 million, and residual administrative increases of \$165 million. The decrease in operations reflects the completion of the heavy expenditures incurred during FY 2006 as NASA had focused on Return to Flight activities for the Space Shuttle.

**Uses of Funds for the Fiscal Year Ended September 30, 2007**  
(Dollars in Millions)



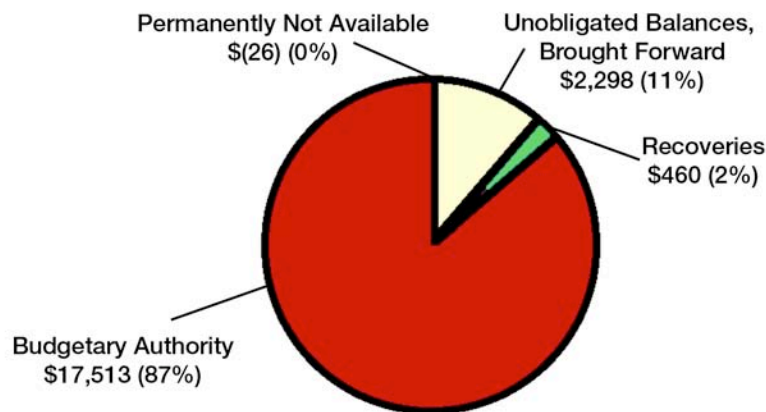
**Total Uses of Funds: \$15,078**

Source: AFR Addendum: Consolidated Statement of Net Cost, Unaudited.

**Sources of Funding**

Funds available for NASA's FY 2007 operations totaled \$20.2 billion as shown below. This compares with total sources of funds in FY 2006 of \$20.1 billion. Unobligated Balances, Brought Forward was \$2.3 billion, \$57 million (2%) more than at the beginning of FY 2006. Congress provides two-year appropriations for the Agency. NASA's Budgetary Authority decreased by \$0.2 billion (1%) in FY 2007, to \$17.5 billion, primarily due to a \$0.6 billion reduction in NASA's appropriations funding compared with the President's request, resulting from the operation of an ongoing Congressional budget resolution affecting most Federal agencies.

**Sources of Funds for the Fiscal Year Ended September 30, 2007**  
(Dollars in Millions)



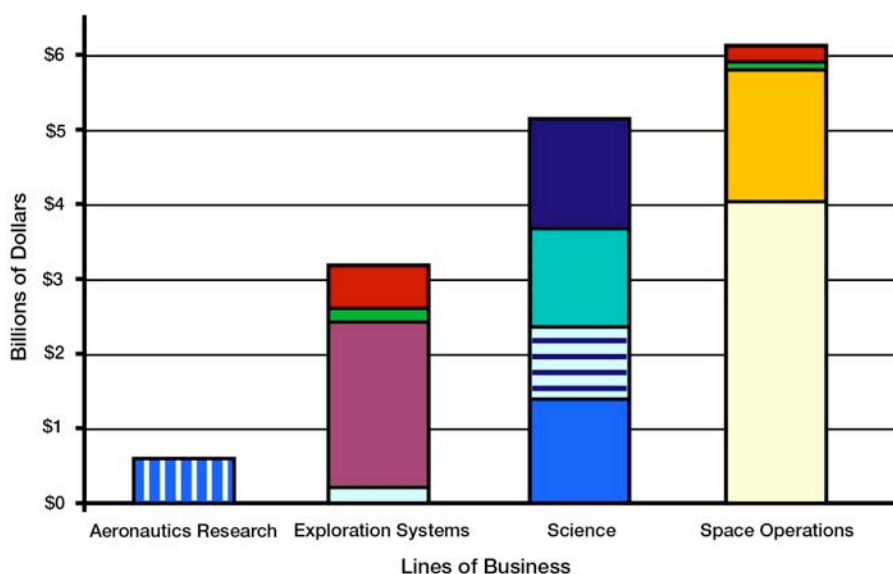
**Total Sources of Funds: \$20,246**

Note: Nonexpenditure transfers of \$1 M do not appear in the chart.  
Source: AFR Addendum: Combined Statement of Budgetary Resources, Unaudited.












## Expenditures Toward Strategic Goals

Although NASA allocates budgets and tracks costs of each of the Mission Directorates (i.e., the Agency's lines of business), the Agency also measures the cost of pursuing each of its strategic goals. To measure such costs, NASA maps each Mission Directorate's costs (as shown on the Statement of Net Costs) to each strategic goal. A description of each strategic goal and the Agency's progress toward its achievement is provided in the Performance Overview section above.

### Expenditures on Strategic Goals by Line of Business



### Expenditures by Strategic Goal and Sub-goal (Dollars in Billions)

Strategic Goals and Sub goals		Unaudited 2007
	1: Fly Space Shuttle safely, retire by 2010	\$ 4.0
	2: Complete International Space Station	\$1.8
3: Balanced program of science, exploration, and aeronautics:		
	3A: Study Earth from Space	\$1.4
	3B: Understand the Sun	\$1.0
	3C: Origin and history of the solar system	\$1.3
	3D: Origin, structure, and evolution of the universe	\$1.5
	3E: Aeronautics research	\$0.6
	3F: Impacts of space environment and long-duration flight on humans	\$0.2
	4: Develop a Crew Exploration Vehicle to replace Space Shuttle	\$2.2
	5: Partnerships with commercial space sector	\$0.3
	6: Lunar return program with utility for farther subsequent missions	\$0.8
<b>Total (Net Cost of Operations)</b>		<b>\$ 15.1</b>

Note: For complete text of Goals and Subgoals, see NASA's Strategic Goals section above.  
Sources: AFR Addendum: Statement of Net Cost, Unaudited. Operating Plan for July 2007.

## Balance Sheet

The following table provides summary financial information for fiscal years 2007 and 2006.

### Summary Balance Sheet (Dollars in Millions)

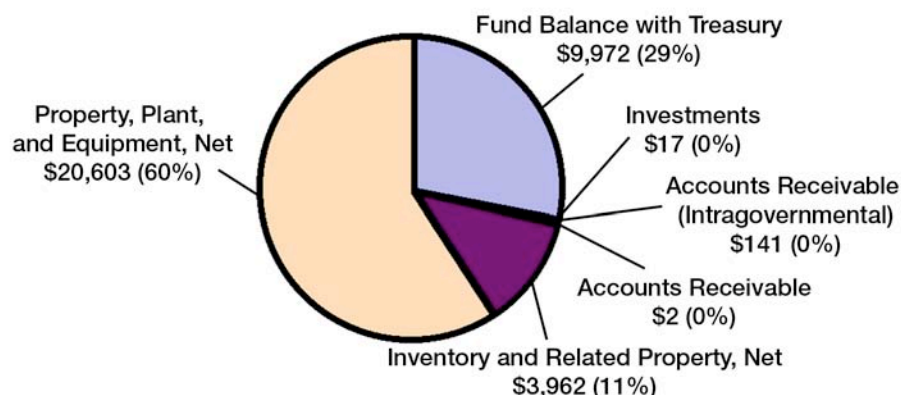
	\$ Change	% Change	Unaudited 2007	Unaudited 2006 Restated
<b>Balance Sheet Data:</b>				
Intragovernmental				
Fund Balance With Treasury	\$ 387	4%	\$ 9,972	\$ 9,585
Investments	0	0%	17	17
Accounts Receivable	-39	-22%	141	180
Total Intragovernmental	<u>348</u>		<u>10,130</u>	<u>9,782</u>
Accounts Receivable	-3	-60%	2	5
Inventory and Related Property, Net	1,632	70%	3,962	2,330
Property, Plant, and Equipment, Net	-12,658	-38%	20,603	33,261
<b>Total Assets</b>	<b>\$ -10,681</b>	<b>-24%</b>	<b>\$ 34,697</b>	<b>\$ 45,378</b>
Intragovernmental:				
Accounts Payable	\$ 279	192%	\$ 424	\$ 145
Other	-48	-31%	109	157
Total Intragovernmental	<u>231</u>		<u>533</u>	<u>302</u>
Accounts Payable	188	22%	1,036	848
Federal Employee and Veteran Benefits	4	7%	64	60
Environmental and Disposal Liabilities	70	8%	963	893
Other	179	15%	1,389	1,210
<b>Total Liabilities</b>	<b>672</b>	<b>20%</b>	<b>3,985</b>	<b>3,313</b>
Unexpended Appropriations	-215	-3%	7,470	7,685
Cumulative Results of Operations	-11,138	-32%	23,242	34,380
<b>Total Net Position</b>	<b>-11,353</b>	<b>-27%</b>	<b>30,712</b>	<b>42,065</b>
<b>Total Liabilities and Net Position</b>	<b>\$ -10,681</b>	<b>-24%</b>	<b>\$ 34,697</b>	<b>\$ 45,378</b>

Source: AFR Addendum: Consolidated Balance Sheet, Unaudited

## Assets

The Consolidated Balance Sheet shows NASA with total assets of \$34.7 billion at the end of FY 2007, a decrease of \$10.7 billion (24%) over the previous year's total of \$45.4 billion. PP&E decreased by \$12.7 billion (38%) primarily due to a Change in Accounting Principle discussed below. Inventory and Related Property increased by \$1.6 billion (70%) due to increased acquisition of operating materials and supplies for the Space Shuttle and the International Space Station (ISS). The assets shown in the Consolidated Balance Sheet are summarized in the following chart.

**Major Assets by Type as of September 30, 2007**  
(Dollars in Millions)



**Total Assets: \$34,697**

Source: AFR Addendum: Consolidated Balance Sheet, Unaudited.

In FY 2007, NASA changed its accounting policy for Property, Plant and Equipment (PP&E) to reclassify costs previously categorized as General Property, Plant and Equipment (PP&E) as Research and Development (R&D) expenses. This resulted in the reclassification of \$12.7 billion of previously classified PP&E to period expenses. The reclassification represented 37% of the Agency's total FY 2007 assets balance. The Change in Accounting Principle acknowledges that much of the Agency's work is primarily Research & Development (R&D) and creates better alignment between the Agency's accounting practices and the use of its program and project funding. NASA requested and received technical guidance from FASAB\* on applying Statement of Financial Accounting Standards (SFAS) No. 2, *Accounting for Research and Development Costs*, when accounting for the cost of R&D programs and projects. This clarification permitted the application of the criteria of SFAS No. 2 when determining if a program or project acquisition should be capitalized or if it should be expensed in the period the costs are incurred. NASA retroactively applied these criteria to items previously acquired and classified as PP&E, resulting in the reduced PP&E balance shown in the FY 2007 financial statements. NASA has revised its accounting policies and procedures to incorporate these criteria into the capitalization decision process for costs it incurs in the future to acquire items that support its programs and projects (see *Note 1. Summary of Significant Accounting Policies* for additional discussion of the Change in Accounting Principle).

Also in FY 2007, NASA revised the classifications used to accumulate and report PP&E costs (see *Note 7. Property, Plant, and Equipment, Net*). NASA now classifies PP&E costs as either Space Exploration PP&E or General PP&E. Space Exploration PP&E is comprised of those assets employed by the Agency's programs and projects in pursuit of specific mission goals. General PP&E is comprised of common-use institutional assets that support multiple programs and projects.

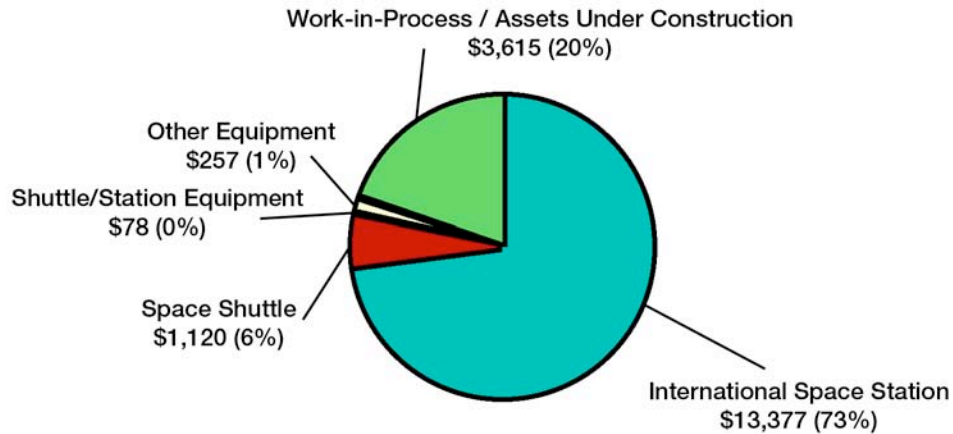
NASA's total combined Space Exploration and General PP&E of \$20.6 billion at the end of FY 2007 remained essentially flat as depreciation and new capitalized assets were roughly equivalent at \$2.9 billion in FY 2007. Of NASA's total \$20.6 billion PP&E at fiscal year end 2007, 90% was Space Exploration PP&E (net of accumulated depreciation). Of total Space Exploration PP&E, 72% was International Space Station (ISS) PP&E. The category "Work-in-Process/Assets Under Construction" pertains to Space Shuttle and ISS development. Consistent with President Bush's vision for the Nation's space exploration program, NASA expects to retire the Space Shuttles in 2010. The International Space Station is being depreciated based upon a 15-year specification life through 2016.

\* Federal Accounting Standards Advisory Board

General PP&E (net of accumulated depreciation), at \$2.2 billion, comprised the remaining 10% of the Agency's total PP&E. Of General PP&E, the largest component was Structures, Facilities and Leasehold Improvements, with a net book value of \$1.6 billion.

Space Exploration PP&E and General PP&E are summarized in the following charts.

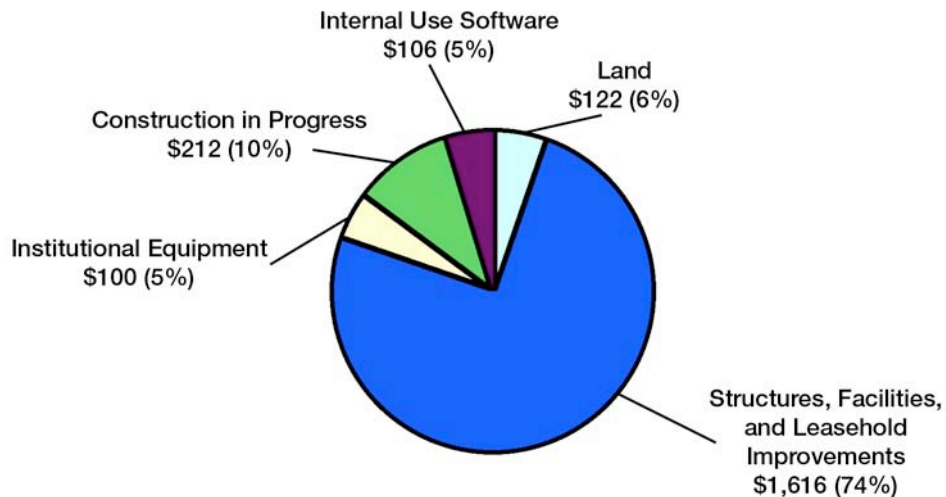
**Space Exploration PP&E by Type, Net as of September 30, 2007**  
(Dollars in Millions)



**Total Space Exploration PP&E, Net: \$18,447**

Source: AFR Addendum: Note 7. Property, Plant, and Equipment, Net, Unaudited.

**General PP&E by Type, Net as of September 30, 2007**  
(Dollars in Millions)



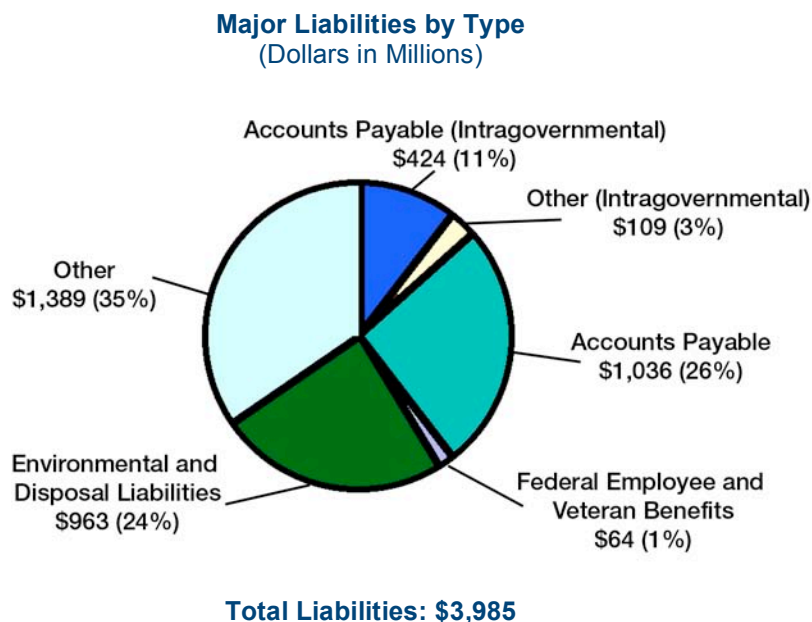
**Total General PP&E, Net: \$2,156**

Source: AFR Addendum: Note 7. Property, Plant, and Equipment, Net, Unaudited.



## Liabilities

NASA had total liabilities of \$4.0 billion as of September 30, 2007, an increase of \$0.7 billion (20%) over FY 2006. This increase reflected an increase in program activities, primarily due to the recent expansion of contract expenditures for Crew Exploration Vehicle (CEV) development by the Exploration Systems Mission Directorate.



Source: AFR Addendum: Consolidated Balance Sheet, Unaudited.

Environmental and Disposal liabilities are estimated cleanup costs for actual or anticipated contamination from waste disposal methods, leaks, spills, and other past NASA activity that created or could create a public health or environmental risk. The estimate represents the amount that NASA expects to spend in the future to remediate currently known contamination. This estimate could change in the future due to the identification of additional contamination, inflation, deflation, or changes in technology or applicable laws and regulations. The estimate will also change through ordinary liquidation of these liabilities as the cleanup program continues. NASA has implemented new procedures and tools to improve the accuracy and consistency of environmental cleanup estimates.

## Restatements

NASA has undertaken a continuous effort to validate and correct Agency financial data. In the course of this action, the Agency identified erroneous account balances. These erroneous account balances occurred in years prior to FY 2006 and stemmed from the Agency's consolidation of its legacy systems into a single Agency-wide system beginning in FY 2002 and FY 2003.

In FY 2007, NASA identified and recorded a prior period adjustment to reflect the retroactive correction of these errors. As described in *Note 17* to the financial statements in the Addendum to this AFR, the error occurred prior to FY 2006 and pertains to differences between supported and unsupported balances in legacy accounting records and data that was converted into the Net Position account in the new system. The FY 2006 beginning balance of Cumulative Results of Operations, as reported on the Statement of Changes in Net Position, has been adjusted (decrease of \$712 million) and Unexpended Appropriations was also adjusted (increase of \$704 million) to reflect this correction.

Additionally, in FY 2007 NASA recorded a prior period adjustment to reflect correction of an error related to property leased to other entities. Leased property was improperly excluded from the property inventory and the

associated correcting adjustments resulted in a \$68 million increase in Cumulative Results of Operations and an increase in the net book value of Property, Plant and Equipment.

## Net Position

Net Position is the sum of Unexpended Appropriations and Cumulative Results of Operations. NASA's Net Position as of September 30, 2007, reported on the Consolidated Balance Sheet and the Consolidated Statement of Changes in Net Position, was \$30.7 billion, an \$11.4 billion decrease from 2006. This decrease is due primarily to the Change in Accounting Principle discussed in the Assets section above, which resulted in the reclassification of \$12.7 billion from PP&E to period expenses offset by a \$1.4 billion net change in Financing Sources.

As described above in the Restatement section, NASA's Net Position also decreased due to a prior period adjustment made in FY 2007 to correct erroneous entries made in 2003 during conversion to a new financial system.

## Financial Operations Performance Indicators

NASA's financial performance in FY 2007 saw significant improvements in several areas. Of the nine metrics reported monthly to the Office of Management and Budget (OMB), NASA is currently fully successful on six, and minimally successful (the next rating category) on the remaining three. NASA is compliant with all prompt payment regulations and is timely in its vendor payments, with 97.99% of non-credit card invoices paid on time, and 0.0032% of interest penalties paid on total non-credit card invoices. These performance metrics compare favorably with the government standards of 98% of invoices paid on time and no more than 0.02% of interest penalties paid. These indicators can be reviewed on the Metric Tracking System (MTS) Financial Management Indicators website, <http://fido.gov/mts/cfo/public>.

This improved performance is a result of the policy, process and procedural improvements made through the Agency's annual corrective action plan process. Results of such actions include:

- NASA has improved substantially its Funds Balance with Treasury metric performance and significantly reduced the un-reconciled differences between the U.S. Treasury and NASA balances in its Fund Balance with Treasury account. The large un-reconciled balances in 2003 (\$1.74 billion), 2004 (\$502.1 million), and 2005 (\$46.8 million), have been improved and reduced to reconciled differences of \$6.4 million for 2006 and \$4.0 million for 2007 through enhanced reconciliation procedures and management oversight. The Agency is now "fully successful" on this performance indicator.
- While NASA has significantly reduced the dollar amounts, the Agency retains a "minimally successful" rating for the *Suspense Balances Greater than 60 Days Old* metric, due to an \$11 thousand outstanding balance at one of the Agency's Centers. It is expected to be resolved in early FY 2008.
- While NASA's performance has improved on the *Travel Card Delinquency Rate—Individually Billed Accounts* metric over the past reporting periods, it remains "minimally successful," at a 2.1% delinquency rate. For travel card charges billed directly to the Agency (centrally billed), the delinquency rate is 0.0% ("fully successful").

Additionally, NASA improved its approach and processes for implementing Congressional requirements for identifying improper payments. Results of the Agency's Improper Payments Improvement Act (IPIA) program risk assessment showed that improper payment rates were less than .01%, and are significantly below OMB's thresholds for reporting purposes. Details of this assessment can be found in the Addendum of this AFR.

Also in FY 2007, NASA more closely aligned its consolidated statement of net cost with funding provided by Congressional appropriations action and improved the relevance and timeliness of financial reporting through a Change in Accounting Principle for capitalization of Property, Plant, and Equipment (PP&E). As described in the Assets section above, this change acknowledges that much of the Agency's work is Research & Development (R&D) and that, consistent with Federal Accounting Standards Advisory Board guidance, many program and project costs previously capitalized as assets should be expensed. The change reclassified \$12.7 billion from PP&E (assets)

to expenses. NASA has also modified its accounting practices to better identify assets at project inception and track the costs of these assets through project lifecycles.

As a result of NASA's FY 2007 progress, OMB rates NASA's Progress in the Financial Management Initiative of the President's Management Agenda as "green."

The Agency recognizes that more remains to be done to improve NASA's financial management performance. NASA is aggressively working toward resolving all financial weaknesses as a part of the Agency's effort toward achieving auditable financial records. Summaries of progress and accomplishments for Asset Management and Financial Systems, Analyses, and Oversight material weaknesses are included in the "Management Assurances: Systems, Controls, and Legal Compliance" section below.

# Management Assurances: Systems, Controls, and Legal Compliance

November 15, 2007

NASA is committed to a robust and comprehensive internal control program that meets the objectives of the *Federal Managers' Financial Integrity Act* (FMFIA) as well as related laws and guidance. Further, however, we recognize that ensuring the effective, efficient, and responsible use of the resources that have been provided to the Agency is not only good stewardship, but also the right approach to maximizing our progress toward the realization of our exploration goals. Within the Agency, I have made it clear that I am responsible for the establishment and maintenance of a sound system of internal control. In turn, I have made it clear to my direct reports that they are responsible for effective internal control regarding their respective mission, mission support, and Center activities—and they have communicated this responsibility to their subordinates. As a result, managers and employees throughout the Agency are active on a daily basis in identifying or updating key control objectives, assessing risks, implementing controls or other mitigating strategies, conducting reviews, and taking corrective actions as necessary. In addition, NASA's basic governance structure—as represented by the Strategic Management Council, Program Management Council, and Operations Management Council—provides both the top-level guidance and the integration required to ensure our internal control program is operating effectively.

During the past year, we have taken several significant steps to further strengthen our internal control program. For example, we modified the leadership and membership of the Senior Assessment Team (a sub-set of the Operations Management Council that is responsible for senior-level, operational oversight of internal control at NASA) to ensure that our internal control efforts adequately address the Agency's programmatic and institutional activities in addition to those pertaining to financial management. We also established a new Office of Internal Controls and Management Systems to support the Senior Assessment Team in implementing its responsibilities for overall internal control policy and oversight.

With respect to internal control over financial reporting, we completed the second year of a planned three year effort to assess the operation of key controls over financial reporting. This year's activities included reviews of the Agency's Financial Reporting processes: General Ledger Management, Journal Voucher Processing, Treasury Reporting, Financial Statement Preparation, and Period End Processing. Finally, to complement the Agency's ongoing internal control activities, we conducted an annual internal control review to assess NASA's posture with respect to key Agency control objectives relating to governance and communications; program alignment, management, and review; and institutional and resources management.

The Office of Management and Budget (OMB) provides general guidance on implementing and reporting on internal control through Circular A-123, *Management's Responsibility for Internal Control*, and Circular A-123, Appendix A, *Internal Control Over Financial Reporting*. With respect to the overall adequacy and effectiveness of internal control within the Agency, I hereby submit a qualified Statement of Assurance that NASA's internal controls meet the objectives of FMFIA. I am submitting this qualified statement based on the fact that our ongoing reviews confirmed that NASA's previously reported material weaknesses—Information Technology Security, Asset Management, and Financial Systems, Analyses, and Oversight—remain. These conditions continue to warrant Agency-level attention as material weaknesses. However, no new material weaknesses were identified during the past year's internal control activities and reviews. Due to the material weaknesses in Asset Management and Financial Systems, Analyses, and Oversight, I am submitting a qualified statement of assurance that the Agency's controls over financial reporting as of June 30, 2007 were operating effectively.

In addition, in accordance with Section 4 of FMFIA, as well as the Federal Financial Management Improvement Act (FFMIA), NASA management is responsible for reporting on our implementation and maintenance of financial management systems that substantially comply with federal systems requirements, applicable federal accounting standards, and the U.S. Government Standard General Ledger (SGL) at the transaction level. We have made substantial strides during the past two years in our ability to prepare financial statements using information generated by our financial management systems; providing reliable and timely financial information to our managers; accounting for our assets consistently and reliably; and performing all of these functions in compliance with Federal accounting standards. However, we have not yet addressed all of the related issues identified by the

financial statement auditors. As a result, I consider this vulnerability to qualify as a non-conformance under the intent of FMFIA and declare that NASA's financial management systems are not substantially compliant with the requirements of FFMIA as of September 30, 2007.

We will continue to aggressively address the weaknesses mentioned earlier, and work to ensure that our internal control program prevents new material weaknesses from developing. As required, we are also providing, below, a status report on each of our three material weaknesses, including progress made on corrective actions during the past year and planned actions for the coming year.

A handwritten signature in black ink, appearing to read "Michael D. Griffin", followed by a long horizontal flourish line extending to the right.

Michael D. Griffin  
Administrator

# **Corrective Action Plans for Continuing Material Weaknesses**

## **Information Technology (IT) Security**

**Background:** The NASA Office of Inspector General (OIG), through independent audits of NASA's Information Technology (IT) Security program over a span of several years, identified a large number of deficiencies warranting management attention. A summary of the audits and related findings revealed that the NASA IT Security Program needs more effective implementation, monitoring, verification and validation, and enforcement. Additionally, the audit findings show that NASA's policy and procedures have not kept up with new Office of Management and Budget (OMB) directives.

Since fiscal year 2003, NASA made progress to correct the deficiencies found as a result of those OIG audits and to correct systemic problems with the IT Security Program. For instance, NASA policy and procedural requirements documents were revised, Office of the Chief Information Officer (OCIO) direction was modified to eliminate identified ambiguities, and standard processes and tools were developed and implemented across NASA. These and other corrective actions were implemented to correct known weaknesses and bring NASA policy into consistency with newly issued Federal regulations, directives and standards. Despite these changes, recent IT security incidents and the OIG audits revealed that some problems still exist in vulnerability scanning, patch management, incident reporting, and operating system configuration management.

IT Security, as a material weakness, affects accomplishment of the Agency mission by potentially compromising the integrity, availability, and confidentiality of mission-critical data. The operational efficiency of the Agency is also hampered by the inconsistent application of security solutions at different NASA Centers. If this weakness continues, mission resources may have to be reallocated to bring the Agency's IT systems into compliance.

**Prior and Planned Activities:** NASA has been improving IT Security for the past four years through an evolving corrective action plan based on findings from extensive internal and external audits. Changes were made to the Agency's IT Security policies, requirements, and standard operating procedures. In FY 2007, NASA established an effective IT certification and accreditation program applied to all Agency IT systems, baselined the Agency IT systems inventory, revised and established standard operating procedures to meet Federal and Agency requirements, and revised the IT security clauses for use in NASA contracts that provide or manage IT. An extensive internal review of the IT Security program was conducted across the Agency and a comprehensive corrective action plan was developed to address the findings.

Based on the comprehensive corrective action plan, in FY 2008, NASA will: 1) Establish a strong IT Security internal controls program; 2) Clearly delineate roles and responsibilities and performance criteria for critical positions; 3) Establish standard agency procedures for performing key IT security functions; 4) Improve IT Security functions and services; 5) Implement a structured IT incident response process; 6) Complete the deployment of Public Key Infrastructure (PKI) across the Agency; 7) Implement encryption solutions to meet OMB M-06-16 "Protection of Sensitive Agency Information" for Sensitive but Unclassified (SBU) data management; and 8) Create an organizational structure that will ensure consistency in the way that NASA Centers implement new IT Security processes.

## **Asset Management**

**Background:** The NASA Inspector General and the Agency's independent financial statement auditors have identified inadequate controls over NASA's Property, Plant and Equipment (PP&E) as a material weakness. This weakness could prevent material misstatements from being detected and corrected in a timely manner. NASA's processes for identifying and recording PP&E costs have relied primarily on a retrospective review of disbursements to determine amounts that should be capitalized as assets. This retrospective review process was not as reliable or accurate as the recommended process of identifying assets at the time of acquisition.

NASA's PP&E, valued at \$20.6 billion, accounts for 60% of the Agency's assets. Accurately tracking and recording PP&E costs is critical to the integrity of the Agency's financial statements and to the accurate valuation of individual asset items. The responsibility for resolving this issue is shared by the Office of the

Chief Financial Officer, Office of Procurement, Office of Institutions and Management, and the Agency's programs and projects.

**Prior and Planned Activities:** In FY 2007, NASA implemented a Change in Accounting Principle related to the Agency's asset capitalization practices to better align NASA's policies, processes, and systems with published accounting standards. This change clarified Agency policy for classifying project costs as Research and Development expenses. The Federal Accounting Standards Advisory Board on June 1, 2007 issued a Technical Bulletin affirming the use of such accounting standards for Research & Development projects.

NASA has identified solutions and implementation plans to address gaps between current and preferred business processes and systems, consistent with the accounting principle change. The Agency has revised and improved processes to support the identification, tracking, and reporting of certain individual asset costs throughout the acquisition lifecycle. Selected assets will now be identified before they are acquired or fabricated, allowing tracking of costs as they are incurred throughout the asset lifecycle. Capturing the cost of each unique asset from inception to disposal will improve cost collection practices and provide a more accurate cost for each of those individual assets. Asset capitalization policies and procedures have been revised to reflect these changes, and are currently under Agency review.

For selected contracts, contractors will report the costs incurred on each individual asset through their regular monthly cost reporting process. This will improve the Agency's ability to reconcile asset costs with contractor cost reporting.

In FY 2008, NASA intends to complete implementation of these revised asset capitalization policies and procedures.

## **Financial Systems, Analyses, and Oversight**

**Background:** In FY 2002 and 2003, NASA implemented a single integrated financial management system to replace the 10 disparate legacy financial systems and over 120 subsidiary systems in use by the Agency's Centers and Headquarters. The introduction of the system highlighted long-standing data and process issues. Additionally, challenges in system processing, configuration, and capabilities resulted in abnormal balances and data errors. These challenges required the introduction of compensating controls to ensure the financial systems met reporting needs.

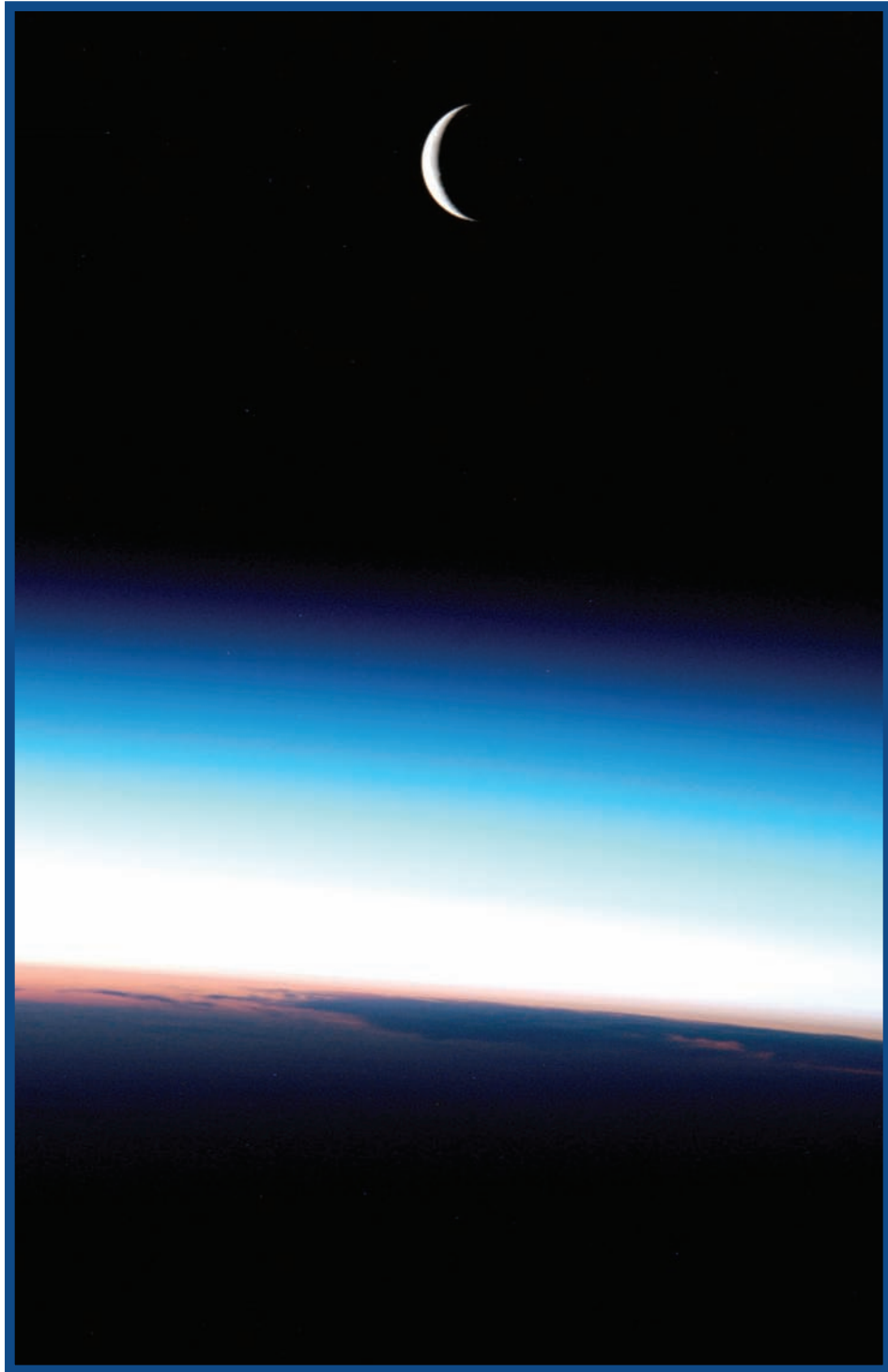
Since that time, the Agency has made significant progress in improving its financial management systems. During FY 2008, the Agency will review its financial systems, analyses, and oversight processes, particularly in light of findings from this year's financial statement and internal control audit, to ensure that the remaining challenges are clearly articulated and that corrective action plans are properly focused.

**Prior and Planned Activities:** NASA implemented a major system upgrade to the Core Financial Module of the Integrated Enterprise Management system in FY 2007 to address many of the most critical system issues. Changes to system configurations and processing logic were accompanied by related business process improvements.

In addition, NASA developed and implemented procedures for identifying and validating the Agency's financial management processes and account balances. Specific progress toward improving this material weakness includes: 1) Developing, distributing and implementing a monthly schedule generated by a cross-Agency task team for data processing, reconciliations, verifications, feedback, and reports; 2) Performing periodic controls reviews and reconciliations at all Centers for 23 discrete financial reporting activities; for deficiencies noted, each Center developed a corrective action plan (monitored monthly by Headquarters) to assure the timely resolution of anomalies; 3) Completing financial management internal control assessments and testing for four significant accounts (Fund Balance with Treasury; Property, Plant and Equipment; Material and Supplies; and Environmental Liabilities) in accordance with the multi-year NASA Financial Management Internal Control Plan; 4) Completing financial management internal control assessments for OMB Circular A-123-A; 5) Reviewing, validating, and redesigning NASA's financial statements to ensure accuracy of reporting and consistency with OMB Circular A-136, Financial Reporting Requirements; and 6) Producing monthly financial statements directly from the Core Financial system within 30 days of the close of each period; this process included documenting data anomalies or corrections and preparation of statement analyses.

During FY 2008, NASA will continue actions to improve Financial Systems, Analyses, and Oversight. The Agency will: 1) continue implementing the NASA Internal Control Framework to establish a standard set of business processes and key controls over financial management; 2) enhance the Periodic Monitoring and Control Financial Management Requirements standards and procedures; and 3) evaluate and implement, as necessary, priority system enhancements.





**National Aeronautics and Space Administration**

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Washington, DC 20546

NP-2007-11-486-HQ

[www.nasa.gov](http://www.nasa.gov)