National Aeronautics and Space Administration

Media contact: 202- 358-1760
FY2011 Request: $19.0 billion
FY2010 Enacted: $18.3 billion

The National Aeronautics and Space Administration (NASA) drives advances in science, technology, and exploration to enhance knowledge, education, innovation, economic vitality, stewardship of the Earth, and solutions to national and global challenges. The President's Budget invests an additional $6 billion in NASA over the next five years – an overall $100 billion commitment to the agency.

Build the Foundation for a Bold New Course for Human Space Flight

NASA's Constellation program – based largely on existing technologies – was based on a vision of returning astronauts back to the Moon by 2020. However, the program was over budget, behind schedule, and lacking in innovation due to a failure to invest in critical new technologies. Using a broad range of criteria an independent review panel determined that even if fully funded, NASA's program to repeat many of the achievements of the Apollo era, 50 years later, was the least attractive approach to space exploration as compared to potential alternatives. Furthermore, NASA's attempts to pursue its moon goals, while inadequate to that task, had drawn funding away from other NASA programs, including robotic space exploration, science, and Earth observations. The President's Budget cancels Constellation and replaces it with a bold new approach that invests in the building blocks of a more capable approach to space exploration that includes:

- Research and development to support future heavy-lift rocket systems that will increase the capability of future exploration architectures with significantly lower operations costs than current systems – potentially taking us farther and faster into space.

- A vigorous new technology development and test program that aims to increase the capabilities and reduce the cost of future exploration activities. NASA, working with industry, will build, fly, and test in orbit key technologies such as automated, autonomous rendezvous and docking, closed-loop life support systems, in-orbit propellant transfer, and advanced in-space propulsion so that our future human and robotic exploration missions are both highly capable and affordable.

- A steady stream of precursor robotic exploration missions to scout locations and demonstrate technologies to increase the safety and capability of future human missions and provide scientific dividends.

Expand America's Drive to 21st Century Space Exploration

- $369 million for a new agency-wide technology development and test program aimed at increasing the capabilities and reducing the cost of future NASA, other government, and commercial space activities.
- $183 million to extend operations of the ISS past its previously planned retirement date of 2016. NASA will deploy new research facilities to conduct scientific research and test technologies in space. New capabilities could include a centrifuge to support research into human physiology, inflatable space habitats, and a program to continuously upgrade Space Station capabilities.
- $600 million to complete the final five shuttle missions, allowing for a safe and orderly retirement of the Space Shuttle program even if its schedule slips into Fiscal Year 2011.

Invest in New Science, Innovation, and Jobs

- $1.2 billion for transformative research in exploration technology that will involve NASA, private industry, and academia, sparking spin-off technologies and potentially entire new industries.
- $150 million to accelerate the development of new satellites for Earth Science priorities.
- $170 million to develop and fly a replacement of the Orbiting Carbon Observatory, a mission to identify global carbon sources and sinks that was lost when its launch vehicle failed in 2009.
- $500 million to contract with industry to provide astronaut transportation to the ISS, reducing the sole reliance on foreign crew transports and catalyzing new businesses and significant new jobs.

Increases Scientific Understanding of the Solar System and Universe

- $3.2 billion for science research grants and dozens of missions and telescopes studying the planets and stars – including new missions such as the successor to the Hubble Space Telescope, missions to study the Moon, and two Mars exploration missions.
- $14 million ($420 million over five years) for a mission to the Sun, flying through its outer atmosphere to better understand how it is heated and how it ejects the stream of charged particles known as the solar wind.
- Increase funding to detect asteroids that could potentially pose a hazard to the Earth.

High-Priority Performance Goals

The Administration is committed to building a transparent, high-performance government capable of addressing the challenges of the 21st century. As part of developing the budget, every department identified high-priority performance goals (along with the strategies and in-house resources to achieve them) that each will work to accomplish over the next two years. Highlights of this agency's currently identified goals are:

- Increase efficiency and throughput of aircraft operations during arrival phase of flight.

- Make significant progress towards completion of the integration, test, launch, validation, and initiation of early orbit operations of the Aquarius, Glory, and NPOESS Preparatory Project (NPP) missions prior to the end of Fiscal Year 2011.

- Increase annually the percentage of NASA higher education program student participants employed by NASA, aerospace contractors, universities, and other educational institutions.

To see the Department's full set of performance information, please visit: www.nasa.gov/news/budget/index.html. Given the new investments identified in the President's FY 2011 budget for NASA, additional high-priority performance goals are expected to be formulated in the near future.