

## **NATIONAL AERONAUTICS AND SPACE ADMINISTRATION**

### **Since 2001, the Administration:**

- Announced a bold, new vision for human and robotic exploration of the Moon, Mars, and beyond;
- Began development of a new human spaceflight vehicle, the Orion, and a new rocket, the Ares I, to extend human exploration of the solar system;
- Continued assembly of the International Space Station, a multinational research laboratory in orbit around the Earth;
- Partnered with the private sector to develop commercial transportation to the International Space Station; and
- Successfully initiated 30 robotic spacecraft missions to explore the solar system and universe and to improve understanding of our own planet.

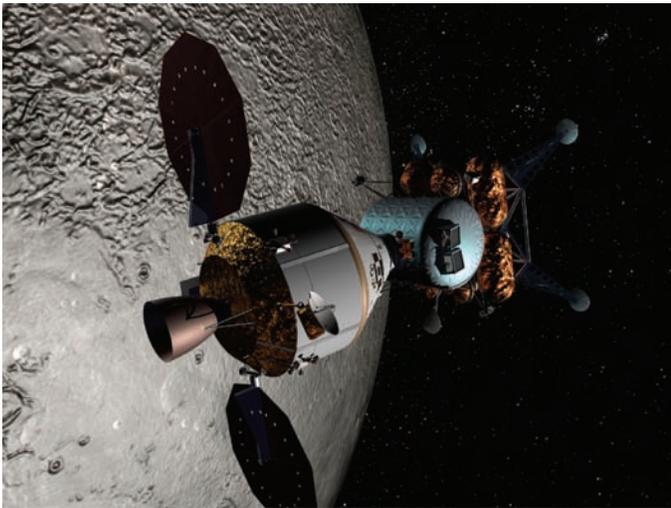
### **The President's 2008 Budget:**

- Prioritizes development of the Orion and Ares I exploration vehicles;
- Provides for the completion of the International Space Station;
- Continues flying the Space Shuttle safely to complete the Space Station, while keeping it on the path to retirement by 2010, ultimately saving taxpayers nearly \$4 billion per year that will be applied to bolder exploration missions;
- Supports a strong program of robotic exploration of the Moon to increase understanding of our nearest neighbor in space and to prepare for future human expeditions;
- Sustains a robust science program to expand understanding of the Earth, the solar system, and the universe; and
- Focuses the Aeronautics program on long-term research of broad benefit to the Nation.

## FOCUSING ON THE NATION'S PRIORITIES

### *The President's Vision for Space Exploration*

Refocusing the National Aeronautics and Space Administration (NASA) on ambitious and inspiring goals, President Bush outlined a bold, new vision for human and robotic space exploration on January 14, 2004. As President Bush explained, "We've undertaken space travel because the desire to explore and understand is part of our character. And that quest has brought tangible benefits that improve our lives in countless ways." The United States will extend human presence across the solar system, starting with a human return to the Moon by the year 2020, in preparation for human exploration of Mars and other destinations.



Lockheed Martin Corp.

Orion and Lunar Lander orbiting the Moon.

The 2008 Budget includes \$951 million for design and development of a new human spaceflight vehicle, the Orion, which will be safer and more reliable than the Space Shuttle. Orion will allow astronauts to land anywhere on the Moon, will support a lunar outpost, and will eventually support human missions to Mars. The Budget also includes \$1.2 billion for development of a new kind of rocket to launch Orion. Called the Ares I, this new rocket will incorporate components of the Space Shuttle. This will allow NASA to use tried and tested components, benefit from an experienced workforce, and smoothly transition many of its operations when the Space Shuttle is retired by 2010. The Ares I will require far less launch preparation than

the Space Shuttle, leading to savings in operating costs that can be applied to future systems and bolder missions.

NASA's exploration of space includes international and commercial participation. NASA continues to assemble the International Space Station, a laboratory orbiting the Earth and involving 16 nations. The 2008 Budget provides \$436 million over three years to award successful demonstration of new, privately developed vehicles capable of transporting cargo and crew to the Space Station. Once the Space Shuttle is retired, commercial services will be NASA's preferred means of supplying the Space Station.

NASA's human exploration efforts are complemented by a robust robotic program. The Lunar Reconnaissance Orbiter is scheduled to launch in the fall of 2008 to map the surface of the Moon and search for future landing sites. The Budget provides \$355 million over five years for a new lunar science program to maximize scientific gain from robotic exploration of the Moon. NASA's recent successful robotic investigations of Mars and Saturn will be followed by missions that will explore some of the least-known areas of the solar system: Mercury, the asteroids, and Pluto. The Mars Science Laboratory will launch in 2009 to sharpen understanding of the red planet; future spacecraft will conduct research and test technologies to support future human exploration of the planet.

***Continued Leadership in Science and Aeronautics***

NASA will also continue to revolutionize astronomy. NASA will service and upgrade the Hubble Space Telescope, and will build new telescopes such as Kepler to find planets around other stars and the James Webb Space Telescope to peer deep into the history of the universe. Furthermore, NASA’s Beyond Einstein program will answer basic questions about the fundamental physics of the universe and its origins. At the same time, NASA will play a major part in Earth science, through such programs as the interagency Climate Change Science Program and the international initiative on the Global Earth Observing System of Systems. NASA also continues developing the Global Precipitation Measurement satellite system to obtain a comprehensive understanding of the Earth’s rainfall, improving the prediction and tracking of hurricanes and other major weather events. The agency will also develop new space probes to study the Sun’s influence on Earth and the space environment.

Guided by the new National Aeronautics Research and Development Policy, NASA will pursue long-term aeronautics research of broad benefit to the Nation, concentrating on fundamental aeronautics, aviation safety, and the needs of the Next Generation Air Transportation System. The 2008 Budget includes \$396 million over five years in grants for aeronautics research to university and industry labs, expanding the participation of the best researchers around the country.

**National Aeronautics and Space Administration**  
(In millions of dollars)

	2006 Actual	Estimate	
		2007	2008
<b>Spending</b>			
Discretionary Budget Authority:			
Science, Aeronautics, and Exploration.....	9,721	9,969	10,483
Exploration Capabilities.....	6,520	6,194	6,792
Office of Inspector General.....	32	32	35
Total, Discretionary budget authority .....	16,273	16,195	17,310
<i>Memorandum: Budget authority from enacted supplementals .....</i>	<i>385</i>	<i>—</i>	<i>—</i>
Total, Discretionary outlays .....	15,213	16,156	17,264
Total, Mandatory outlays .....	–88	–13	–14
Total, Outlays .....	15,125	16,143	17,250