NASA STRATEGIC OBJECTIVES FOR 2005 AND BEYOND

1. Undertake robotic and human lunar exploration to further science and to develop and test new approaches, technologies, and systems to enable and support sustained human and robotic exploration of Mars and more distant destinations. The first robotic mission will be no later than 2008.

2. Conduct robotic exploration of Mars to search for evidence of life, to understand the history of the solar system, and to prepare for future human exploration.

3. Conduct robotic exploration across the solar system for scientific purposes and to support human exploration. In particular, explore the moons of Jupiter, asteroids, and other bodies to search for evidence of life, to understand the history of the solar system, and to search for resources.

4. Conduct advanced telescope searches for Earth-like planets and habitable environments around the stars.

5. Explore the universe to understand its origin, structure, evolution, and destiny.

6. Return the Space Shuttle to flight and focus its use on completion of the International Space Station, complete assembly of the ISS, and retire the Space Shuttle in 2010, following completion of its role in ISS assembly. Conduct ISS activities consistent with U.S. obligations to ISS partners.

7. Develop a new crew exploration vehicle to provide crew transportation for missions beyond low Earth orbit. First test flight to be by the end of this decade, with operational capability for human exploration no later than 2014.

8. Focus research and use of the ISS on supporting space exploration goals, with emphasis on understanding how the space environment affects human health and capabilities, and developing countermeasures.

9. Conduct the first extended human expedition to the lunar surface as early as 2015, but no later than 2020.

10. Conduct human expeditions to Mars after acquiring adequate knowledge about the planet using robotic missions and after successfully demonstrating sustained human exploration missions to the Moon.

11. Develop and demonstrate power generation, propulsion, life support, and other key capabilities required to support more distant, more capable, and/or longer duration human and robotic exploration of Mars and other destinations.

12. Provide advanced aeronautical technologies to meet the challenges of next generation systems in aviation, for civilian and scientific purposes, in our atmosphere and in atmospheres of other worlds.

13. Use NASA missions and other activities to inspire and motivate the Nation’s students and teachers, to engage and educate the public, and to advance the scientific and technological capabilities of the nation.

14. Advance scientific knowledge of the Earth system through space-based observation, assimilation of new observations, and development and deployment of enabling technologies, systems, and capabilities, including those with the potential to improve future operational systems.

15. Explore the Sun–Earth system to understand the Sun and its effects on Earth, the solar system, and the space environmental conditions that will be experienced by human explorers, and demonstrate technologies that can improve future operational systems.

16. Pursue opportunities for international participation to support U.S. space exploration goals.

17. Pursue commercial opportunities for providing transportation and other services supporting International Space Station and exploration missions beyond Earth orbit. Separate to the maximum extent practical crew from cargo.

18. Use U.S. commercial space capabilities and services to fulfill NASA requirements to the maximum extent practical and continue to involve, or increase the involvement of, the U.S. private sector in design and development of space systems.