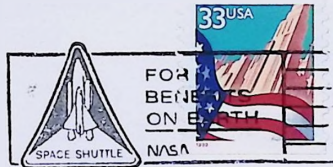


SPACE SHUTTLE  
STS-103/DISCOVERY



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## SPACE SHUTTLE (STS-103/DISCOVERY)

**STS-103** – The third Hubble Space Telescope (HST) servicing mission – is designed to replace worn parts on the 9-year observatory and upgrade its functioning. Hubble, which was launched into orbit aboard Discovery in April 1990, has provided revolutionary insights into our solar system and the universe beyond. During STS-103 all six of Hubble's gyroscopes will be replaced, including a guidance sensor and the Telescope's main computer. Four spacewalks are planned for the HST mission and after two more Hubble servicing missions NASA plans to end Hubble's operations in 2010 with a "close-out" Shuttle mission.

**THE STS-103 CREW** – The seven member multinational crew will be led by Commander **Curtis L. Brown, Jr.**, an astronaut for more than 11 years who is making his sixth trip into space. He has logged more than 1,190 hours in space and over 6000 hours in jet aircraft. Pilot **Scott J. Kelly** is a first time flier aboard a Space Shuttle. He has logged more than 2,000 flight hours in more than 30 different aircraft since joining the astronaut program in 1996. Payload Commander **Steven L. Smith** is a veteran of two spaceflights and has performed three spacewalks during the STS-82 mission that serviced Hubble. The four mission specialists are: **C. Michael Foale**, a veteran of four space voyages, will be making his fifth spaceflight after previously accumulating 160 days aboard the Russian Space Station Mir; **John M. Grunsfeld**, a two-time space flier, started his astronaut training in 1992, after holding numerous academic positions and performing research in various areas of astrophysics; Swiss astronaut **Claude Nicollier** will be making his fourth space trip since his selection as a European Space Agency astronaut in 1978 and chosen by NASA for astronaut training in 1980; and **Jean-Francois Clervoy**, a European Space Agency astronaut, has flown on the Shuttle twice. He was selected as a French astronaut in 1985 and then an ESA astronaut in 1992.

**THE STS-103 CREW INSIGNIA** – Designed by the crewmembers, the STS-103 emblem depicts the Space Shuttle Discovery approaching the Hubble Space Telescope prior to its capture and berthing. The horizontal and vertical lines centered on the Telescope symbolize the ability to reach and maintain a desired attitude in space, essential to the instrument's scientific operation. HST, as represented on this patch was inspired by views from previous servicing missions, with its solar arrays illuminated by the Sun, that provides a striking contrast with the blackness of space and the night side of Earth.