

# Biographical Data

Lyndon B. Johnson Space Center  
Houston, Texas 77058



National Aeronautics and  
Space Administration

**MARSHA S. IVINS**  
**NASA ASTRONAUT (FORMER)**

**PERSONAL DATA:** Born April 15, 1951, in Baltimore, Maryland.

**EDUCATION:** Graduated from Nether Providence High School, Wallingford, Pennsylvania, in 1969; received a bachelor of science degree in aerospace engineering from the University of Colorado in 1973.

**NASA EXPERIENCE:** Ms. Ivins was employed at the Lyndon B. Johnson Space Center beginning July 1974, working as an engineer for orbiter displays and controls and man machine engineering, and development of the Orbiter Heads-Up Display (HUD). In 1980, she was assigned as a flight engineer on the Shuttle Training Aircraft (Aircraft Operations) and a co-pilot in the NASA administrative aircraft (Gulfstream-1). Ms. Ivins was selected in the NASA Astronaut Class of 1984 as a mission specialist.



Ms. Ivins holds a multi-engine Airline Transport Pilot License with Gulfstream-1 type rating, single engine airplane, land, sea, and glider commercial licenses, and airplane, instrument, and glider flight instructor ratings. She has logged over 7000 hours in civilian and NASA aircraft.

A veteran of five space flights, (STS-32 in 1990, STS-46 in 1992, STS-62 in 1994, STS-81 in 1997, and STS-98 in 2001), Ms. Ivins has logged over 1,318 hours in space.

Ms. Ivins was assigned to the Astronaut Office supporting the Space Shuttle, Space Station and Constellation Branches. She departed NASA on December 31, 2010.

**SPACE FLIGHT EXPERIENCE:** STS-32 (January 9-20, 1990) launched from the Kennedy Space Center, Florida, on an eleven-day flight, during which crew members on board the Orbiter Columbia successfully deployed a Syncom satellite, and retrieved the 21,400-pound Long Duration Exposure Facility (LDEF). Mission duration was 261 hours, 1 minute, and 38 seconds. Following 173 orbits of the Earth and 4.5 million miles, Columbia returned with a night landing at Edwards Air Force Base, California.

STS-46 (July 31-August 8, 1992) was an 8-day mission, during which crew members deployed the European Retrievable Carrier (EURECA) satellite, and conducted the first Tethered Satellite System (TSS) test flight. Mission duration was 191 hours, 16 minutes, and 7 seconds. Space Shuttle Atlantis and her crew launched and landed at the Kennedy Space Center, Florida, completing 126 orbits of the Earth in 3.35 million miles.

STS-62 (March 4-18, 1994) was a 14-day mission for the United States Microgravity Payload (USMP) 2 and Office of Aeronautics and Space Technology (OAST) 2 payloads. These payloads studied the effects of microgravity on materials sciences and other space flight technologies. Other experiments on board included demonstration of advanced teleoperator tasks using the remote manipulator system, protein crystal growth, and dynamic behavior of space structures. Mission duration was 312 hours, 23 minutes, and 16 seconds. Space Shuttle Columbia launched and landed at the Kennedy Space Center, Florida, completing 224 orbits in 5.82 million miles.

STS-81 Atlantis (January 12-22, 1997) was a 10-day mission, the fifth to dock with Russia's Space Station Mir, and the second to exchange U.S. astronauts. The mission also carried the Spacehab double module providing additional middeck locker space for secondary experiments. In five days of docked operations more than three tons of food, water, experiment

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equipment and samples were moved back and forth between the two spacecraft. Following 160 orbits of the Earth the STS-81 mission concluded with a landing on Kennedy Space Center's Runway 33 ending a 3.9 million mile journey. Mission duration was 244 hours, 56 minutes.

STS-98 Atlantis (February 7-20, 2001) continued the task of building and enhancing the International Space Station by delivering the U.S. laboratory module Destiny. The Shuttle spent seven days docked to the station while Destiny was attached and three spacewalks were conducted to complete its assembly. The crew also relocated a docking port, and delivered supplies and equipment to the resident Expedition-1 crew. Space Shuttle Atlantis returned to land at Edwards Air Force Base, California traveling 5.3 million miles in 203 orbits. Mission duration was 12 days, 21 hours, 20 minutes.

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