

Biographical Data

Lyndon B. Johnson Space Center
Houston, Texas 77058



National Aeronautics and
Space Administration
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DANIEL W. BURSCH (CAPTAIN, USN, RET.)
NASA ASTRONAUT (FORMER)

DATA: Born July 25, 1957, in Bristol, Pennsylvania, but considers Vestal, New York, to be his hometown. He has four children and one grandchild. Hobbies include woodworking and working on cars. His parents, Dudley and Betsy Bursch, are deceased.

EDUCATION: Graduated from Vestal Senior High School, Vestal, New York, in 1975; received a Bachelor of Science in Physics from the United States Naval Academy in 1979; Master of Science in Engineering Science from the Naval Postgraduate School in 1991.

ORGANIZATIONS: Member of the U.S. Naval Academy Alumni Association and the American Institute of Aeronautics and Astronautics (AIAA).

SPECIAL HONORS: Awarded the Defense Superior Service Medal, NASA Space Flight Medals, the Navy Commendation Medal and the Navy Achievement Medal. Distinguished graduate, U.S. Naval Academy and U.S. Naval Test Pilot School.



EXPERIENCE: Bursch graduated from the U.S. Naval Academy in 1979, and was designated a naval flight officer in April 1980 at Pensacola, Florida. After initial training as an A-6E Intruder bombardier/navigator (B/N), he reported to Attack Squadron 34 in January 1981, and deployed to the Mediterranean aboard the USS John F. Kennedy, and to the North Atlantic and Indian Oceans aboard the USS America. He attended the U.S. Naval Test Pilot School in January 1984. Upon graduation in December he worked as a project test flight officer flying the A-6 Intruder until August 1984, when he returned to the U.S. Naval Test Pilot School as a flight instructor. In April 1987, Bursch was assigned to the Commander, Cruiser-Destroyer Group 1, as Strike Operations Officer, making deployments to the Indian Ocean aboard the USS Long Beach and the USS Midway. Redesignated an Aeronautical Engineering Duty officer (AEDO), he attended the Naval Postgraduate School in Monterey, California, from July 1989 until his selection to the astronaut program.

He has over 3,430 flight hours in more than 35 different aircraft.

NASA EXPERIENCE: Selected by NASA in January 1990, Bursch became an astronaut in July 1991. His technical assignments to date include: Astronaut Office Operations Development Branch, working on controls and displays for the Space Shuttle and Space Station; Chief of Astronaut Appearances; spacecraft communicator (CAPCOM) in mission control. A veteran of four space flights, Bursch has logged over 227 days in space. He was a mission specialist on STS-51 (1993), STS-68 (1994) and STS-77 (1996), and served as flight engineer on ISS Expedition-Four (2001-2002). Dan Bursch and fellow astronaut Carl Walz currently hold the U.S. space flight endurance record of 196 days in space. In January 2003, Bursch reported to the Naval Postgraduate School in Monterey, CA for a two year assignment as an instructor in the Space Systems Academic Group. He left NASA in May 2005, and later retired from active duty in July 2005 after 26 years of service in the US Navy. Bursch joined The Aerospace Corporation in July 2005 and is currently serving as the National Reconnaissance Office (NRO) Chair at the Naval Postgraduate School.

SPACE FLIGHT EXPERIENCE: STS-51 launched from the Kennedy Space Center, Florida, on September 12, 1993. During the ten-day mission the crew of five aboard the Shuttle Discovery deployed the U.S. Advanced Communications Technology Satellite (ACTS), and the Shuttle Pallet Satellite (SPAS) with NASA and German scientific experiments aboard. Following a spacewalk by two crew members to evaluate Hubble Space Telescope repair tools, the crew initiated rendezvous burns and Bursch recovered the SPAS using the Remote Manipulator System (RMS). The mission concluded on September 22, 1993, with the first night landing at the Kennedy Space Center. Mission duration was 236 hours and 11 minutes.

STS-68, Space Radar Lab-2 (SRL-2), launched from the Kennedy Space Center, Florida, on September 30, 1994. As part of NASA's Mission to Planet Earth, SRL-2 was the second flight of three advanced radars called SIR-C/X-SAR (Spaceborne Imaging Radar-C/X-Band Synthetic Aperture Radar), and a carbon-monoxide pollution sensor, MAPS (Measurement of Air Pollution from Satellites). SIR-C/X-SAR and MAPS operated together in Endeavour's cargo bay to study Earth's surface and atmosphere, creating radar images of Earth's surface environment and mapping global production and transport of carbon monoxide pollution. Real-time crew observations of environmental conditions, along with over 14,000 photographs aided the science team in interpreting the SRL data. The SRL-2 mission was a highly successful test of technology intended for long-term environmental and geological monitoring of planet Earth. Following 183 orbits of the Earth, the eleven-day mission ended with Space Shuttle Endeavour landing at Edwards Air Force Base, California, on October 11, 1994. Mission duration was 269 hours and 46 minutes.

STS-77 launched from the Kennedy Space Center on May 19, 1996. It included the fourth Spacehab module flight as a scientific laboratory, designated SPACEHAB-4. It consisted of 12 separate materials processing, fluid physics and biotechnology experiments, with an emphasis on commercial space product development. STS-77 completed a record four rendezvous in support of two satellites sponsored by the Goddard Space Flight Center, and the SPARTAN 207/Inflatable Antenna Experiment (IAE) and the Passive Aerodynamically-stabilized Magnetically-damped Satellite/Satellite Test Unit (PAMS/STU). Following 160 orbits of the Earth, the ten-day mission ended with Space Shuttle Endeavour landing at the Kennedy Space Center on May 29, 1996. Mission duration was 240 hours and 39 minutes.

The Expedition-Four crew launched on December 5, 2001 aboard STS-108 and docked with the International Space Station on December 7, 2001. During a 6-1/2 month stay aboard the Space Station, the Expedition-4 crew of three (two American astronauts and one Russian cosmonaut) performed flight tests of the station hardware, conducted internal and external maintenance tasks, and developed the capability of the station to support the addition of science experiments. The crew spent 196 days. Wearing the Russian Orlan spacesuit, Bursch also logged 11 hours and 48 minutes of EVA time in two separate spacewalks. The Expedition-Four crew returned to Earth aboard STS-111, with Endeavour landing at Edwards Air Force Base, California, on June 19, 2002.