ASTRONAUT BIOGRAPHY

National Aeronautics and Space Administration

Lyndon B. Johnson Space Center
Houston, Texas 77058

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Daniel C. Burbank

(Captain, U.S. Coast Guard, Ret.) NASA Astronaut

Summary:
Daniel C. Burbank was selected by NASA as an astronaut in April 1996. The Connecticut native has served as Mission Specialist on Space Shuttle missions STS-106 and STS-115, Flight Engineer on Expedition 29 and Commander of Expedition 30. For STS-106, Burbank and his crewmates prepared the International Space Station for the arrival of the first permanent expedition crew, delivering more than three tons of supplies and installing batteries, power converters, oxygen generation equipment and a treadmill on the station. For STS-115, the crew delivered and installed the P3/P4 truss and solar arrays that provide about one fourth of the station's electrical power. During the 163 days aboard the station for Expedition 29/30, Burbank and his crew conducted science and technology development experiments and completed dozens of repairs and enhancements to the station's systems. During his career, Burbank logged a total of 188 days in space and 7 hours and 11 minutes of spacewalk time. Burbank retired from NASA June 2018.

Personal Data:
Born July 27, 1961, in Manchester, Connecticut, but considers Yarmouth Port, Massachusetts, to be his home. Married, with two children. Enjoys running, skiing, hiking, sailing, amateur astronomy and playing guitar. His parents, Dan and Joan Burbank, reside in Tolland, Connecticut.

Education:
Graduated from Tolland High School, Tolland, Connecticut, in 1979. Received a Bachelor of Science degree in Electrical Engineering from the U.S. Coast Guard Academy in 1985 and a Master of Science degree in Aeronautical Science from Embry Riddle Aeronautical University in 1990.

Experience:
Burbank received his commission from the U.S. Coast Guard Academy in May 1985 and was assigned to the Coast Guard Cutter Gallatin (WHEC 721) as Deck Watch Officer and Law Enforcement/Boarding Officer. After attending naval flight training in Pensacola, Florida, he was assigned to Coast Guard Air Station Elizabeth City, North Carolina, where he became an Aircraft Commander in the HH-3F Pelican and then Aircraft Commander/Instructor Pilot in the HH-60J Jayhawk. In July 1992, Burbank was assigned to Coast Guard Air Station Cape Cod, Massachusetts, as Rotary Wing Engineering Officer and HH-60J Aircraft Commander/Instructor Pilot. In May 1995, he was assigned to Coast Guard Air Station Sitka, Alaska, as the Aeronautical Engineering Officer and HH-60J Aircraft Commander. Burbank has logged over 4,000 flight hours, primarily in Coast Guard helicopters, and flown more than 2,000 missions, including over 300 search and rescue missions.

NASA Experience:
Selected by NASA in April 1996, Burbank reported to the Johnson Space Center in August 1996. He worked technical assignments in the Astronaut Office Operations Planning branch and International Space Station branch helping to develop the computer displays and procedures used to operate ISS systems and served as Capsule Communicator

Daniel C. Burbank

(CAPCOM) for both space shuttle and station missions and Trans-Atlantic Abort Landing Communicator (TALCOM) for shuttle missions. Between 1998 to 2000, he spent a year in Russia supporting ISS procedure development and hardware test and integration. He was also a member of the Space Shuttle Cockpit Avionics Upgrade design team. From January 2007 to December 2009, Burbank served on the faculty the U.S. Coast Guard Academy, where he taught Astronomy, Aerodynamics and Statics & Engineering Design. Burbank has also served as NASA's Director of Operations – Russia coordinating ISS crew training on Soyuz and ISS Russian systems and supporting Soyuz launch and landing operations. He also served for two years as the Astronaut Office EVA and Robotics Branch Chief. His last two years at NASA were spent as the Chief of the Vehicle Integration and Test Office, leading a team of engineers responsible for ISS hardware and visiting spacecraft testing and the development of launch, landing, recovery and rescue operations for the next generation of US human-rated spacecraft, including Orion, Boeing's Starliner and the SpaceX Dragon.

Spaceflight Experience:
STS-106 Atlantis (September 2000). This was a 12-day International Space Station assembly mission. During that time, the crew prepared the station for the arrival of the first permanent expedition crew, delivering more than three tons of supplies and installing batteries, power converters, oxygen generation equipment and a treadmill on the station.

STS-115 Atlantis (September 2006) International Space Station assembly mission. During the 12-day mission, the crew delivered and installed the P3/P4 truss and solar arrays that provide about one fourth of the station's electrical power. Burbank was the lead shuttle robotics operator delivering the 35,000 lb P3/P4 truss to ISS and performed a spacewalk to complete truss installation, activate the solar alpha rotary joint and enable the solar array and radiator deployment.

Expedition 29/30 (November 14, 2011 to April 27, 2012). With his crewmates, Russian Space Agency cosmonauts Anton Shkaplerov and Anatoly Ivanishin, Burbank launched from the Baikonur Cosmodrome in Kazakhstan on November 14, 2011, aboard the Soyuz TMA-22 and docked to the station on November 16, 2011. They landed their Soyuz spacecraft in Kazakhstan on April 27, 2012. During their 163 days aboard the station, the crew completed dozens of repairs and enhancements to the station's systems, including 23 major hardware upgrades and six major software upgrades to the command and data handling system; conducted a spacewalk to relocate an external cargo boom and install external payloads; docked and undocked five visiting spacecraft and completed a record number of hours of science research involving nearly 200 experiments, including research in human physiology, fluid and combustion physics, Earth and space science and technology development.

Awards/Honors:
NASA Distinguished Service Medal, NASA Exceptional Service Medal, NASA Spaceflight Medals (three), Defense Superior Service Medals (two), Legion of Merit, Air Medal, Coast Guard Commendation Medals (two), Coast Guard Achievement Medal and various other service awards.

Organizations:
American Institute of Aeronautics and Astronautics, Association of Space Explorers, FIRST Robotics, Order of Daedalians, U.S. Coast Guard Pterodactyls, U.S. Coast Guard Academy Alumni Association

Pronunciation:
DAN-yull BUR-bank