

ASTRONAUT BIOGRAPHY



National Aeronautics and Space Administration

Lyndon B. Johnson Space Center
Houston, Texas 77058

March 2023



Josh A. Cassada

(Captain, U.S. Navy, Ph.D.) NASA Astronaut

Summary:

Josh A. Cassada was selected by NASA in 2013. He grew up in White Bear Lake, Minnesota and is a physicist and US Navy test pilot. Prior to becoming a naval aviator, Cassada earned his Physics B.A. at Albion College and his Ph. D. at the University of Rochester, conducting experimental high energy physics research at Fermi National Accelerator Laboratory. After two operational deployments in the P-3C, including 23 combat missions, Cassada was a P-3C and P-8A test pilot, as well as an instructor at the US Naval Test Pilot School. Cassada has accumulated more than 4,000 flight hours in over 45 different aircraft.

Cassada launched to the International Space Station as pilot of NASA's SpaceX Crew-5 mission aboard the SpaceX Crew Dragon spacecraft on October 5, 2022. The Crew-5 members lived and worked aboard the station since their docking Oct. 6, 2022. During its mission, the crew contributed to hundreds of experiments and technology demonstrations, including cardiovascular health, bioprinting, and fluid behavior in microgravity to prepare for human exploration beyond low-Earth orbit and to benefit life on Earth. After splashing down safely in their Dragon spacecraft off the coast of Tampa, Florida, on Saturday, March 11, NASA's SpaceX Crew-5 completed the agency's fifth commercial crew rotation mission to the International Space Station. The international crew of four spent 157 days in orbit. Cassada conducted three spacewalks totaling 21 hours, 24 minutes.

Personal Data:

Born in San Diego, California, but considers his hometown to be White Bear Lake, Minnesota. Married to the former Megan Friedly of Charlevoix, Michigan. They have two children.

Education:

Graduated from White Bear Lake Area High School, White Bear Lake, Minnesota in 1991. Earned a Bachelor of Arts Degree in Physics from Albion College, Albion, Michigan in 1995. He earned a Master of Arts Degree (1997) and a Doctorate (2000) in Physics with a specialty in high energy particle physics from the University of Rochester, Rochester, New York.

Experience:

After completing his research at Fermi National Accelerator Laboratory and defending his dissertation, Cassada was awarded his Ph.D. from the University of Rochester in 2000. He was commissioned as a naval officer later that same year, earning his wings of gold as a naval aviator in 2001. He began his operational flying career in 2002 with the Fighting Tigers of VP-8, stationed in Brunswick, Maine. As P-3C patrol plane commander, mission commander, and instructor pilot, Cassada was deployed to the Western Pacific, Mediterranean Sea, and Central America, serving in various operations including Iraqi Freedom, Enduring Freedom and multiservice tsunami relief during Operation Unified Assistance. Following graduation from the U.S. Naval Test Pilot School in 2006, he served as a developmental test pilot for P-8A and P-3C aircraft in Patuxent River, Maryland. He was the P-8A Airworthiness Project Officer and lead test pilot

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for various Maritime Patrol & Reconnaissance Aircraft programs. Cassada then completed a tour as a T-38C and T-6A instructor pilot at the U.S. Naval Test Pilot School, providing instruction in every phase of the fixed-wing curriculum. In 2011, he was assigned to DCMA Boeing Seattle as the Chief of Flight Operations, leading all aircraft operations and contract oversight for P-8A, KC-46, AWACS and USMC UAV while also executing the Navy's flight test acceptance of P-8A aircraft. He later co-founded Quantum Opus, LLC, providing high-speed, low-loss photon detectors to enable next-generation experiments in quantum optics, optical quantum computation, single-photon communication, low-flux biophotonics, and remote sensing. He has accumulated more than 4,000 flight hours in over 40 different aircraft, as well as 23 combat missions.

NASA Experience:

Cassada was selected in June 2013 as one of eight members of the 21st NASA astronaut class. His astronaut candidate training included intensive instruction in International Space Station systems, extravehicular activity, robotics, Russian language training, physiological training, T-38 flight training, and water and wilderness survival training. Following completion of astronaut candidate training in July 2015, Cassada supported real-time space station operations and integration, including serving as a capsule communicator in Mission Control, as well as development of both the Orion spacecraft and Commercial Crew Program spacecraft.

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Awards/Honors:

Awarded the Defense Meritorious Service Medal, three Navy and Marine Corps Commendation Medals, including a Combat V, the Navy and Marine Corps Achievement Medal and various unit commendations. Graduated summa cum laude from Albion College. Albion College Distinguished Alumnus. Recipient of U.S. Department of Education Teaching Fellowship and the University of Rochester Department of Physics and Astronomy Graduate Teaching Award.