

ASTRONAUT BIOGRAPHY



National Aeronautics and Space Administration

Lyndon B. Johnson Space Center
Houston, Texas 77058

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Shannon Walker

(Ph.D.) NASA Astronaut

Summary:

Shannon Walker was selected by NASA in 2004 as part of the 19th class of astronauts. She holds a Bachelor of Arts degree in Physics, a Master of Science and a Doctorate of Philosophy in Space Physics from Rice University. Walker began her professional career with the Rockwell Space Operations Company at the Johnson Space Center (JSC) in 1987 as a Robotics Flight Controller for the Space Shuttle Program. In 2010, the Houston, Texas native served as Flight Engineer for Expedition 24/25, a long-duration mission aboard the International Space Station that lasted 163 days.

Personal Data:

Born June 4, 1965 in Houston, Texas. Married to astronaut Andy Thomas. Recreational interests include cooking, , running, weight training, flying, camping and travel. Her mother, Sherry Walker, resides in Boerne, Texas. Her father, Robert Walker, is deceased.

Education:

Graduated from Westbury Senior High, Houston, Texas, in 1983; received a Bachelor of Arts degree in Physics from Rice University in 1987; received a Master of Science and a Doctorate of Philosophy in Space Physics from Rice University in 1992 and 1993, respectively.

NASA Experience:

Dr. Walker began her professional career with the Rockwell Space Operations Company at JSC in 1987 as a Robotics Flight Controller for the Space Shuttle Program. From 1990 to 1993, Dr. Walker took a leave of absence to attend graduate school, where her area of study was the solar wind interaction with the Venusian atmosphere.

In 1995, she joined the NASA JSC's civil service and began working in the International Space Station Program in the area of robotics integration. Dr. Walker worked with the International Partners in the design and construction of the robotics hardware for the Space Station. In 1998, she joined the Mission Evaluation Room (MER) as a manager for coordinating on-orbit problem resolution for the International Space Station.

In 1999, Dr. Walker moved to Moscow, Russia to work with the Russian Space Agency and its contractors in the areas of avionics integration and on-orbit integrated problem solving for the Space Station. After a year in Russia she returned to Houston and became the technical lead for the station MER as well as the Deputy Manager of the On-Orbit Engineering Office. Prior to selection as an astronaut candidate, Dr. Walker was the Acting Manager of the On-Orbit Engineering Office.

Selected by NASA as an astronaut in May 2004, Walker completed Astronaut Candidate Training in February 2006. Her training included scientific and technical briefings, intensive instruction in Shuttle and International Space Station systems, physiological training, T-38 flight training, and water and wilderness survival training. She has also completed

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qualifications in the spacewalk skills program and the Canadian Space Agency Mobile Servicing System (MSS) Robotics Operator (MRO) course.

Following her Astronaut Candidate Training, Dr. Walker assumed the duties as the crew support astronaut for the Expedition 14 crew. As a crew support astronaut she was the primary contact for all crew coordination, planning, and interactions, as well as being the primary representative for the crew while they were on orbit. In addition, Dr. Walker was assigned as a Capsule Communicator (CAPCOM) in the Mission Control Center in Houston. In that role, she was the primary communication link between the crew on the space station and the ground support team. She served as the lead Space Station CAPCOM for the STS-118 shuttle mission which docked with the station, carried out four spacewalks and added the S5 truss to the station.

In the Summer of 2007, Dr. Walker began training for a long-duration flight on the International Space Station.

Following her spaceflight, Dr. Walker has served as the Deputy of the Soyuz and Safety Branches and the Chief of the ISS Operations Branch within the astronaut office.

In October of 2011, Dr. Walker commanded the NASA Extreme Environments Mission Operations (NEEMO) 15 mission aboard the Aquarius underwater laboratory. On October 21, Dr. Walker and her crew officially became aquanauts, having spent over 24 hours underwater. Dr. Walker was the 35th person to be both an astronaut and an aquanaut. Dr. Walker was also a member of the 2014 – 2015 Antarctic Search for Meteorites (ANSMET) expedition.

Spaceflight Experience:

Expedition 24/25 (June 15 through November 25, 2010). Dr. Walker launched from the Baikonur Cosmodrome in Kazakhstan on June 15, 2010 and served as the Flight Engineer (co-pilot) of Russian Soyuz TMA-19 spacecraft. The Soyuz crew docked with the Space Station two days later and joined the Expedition 24 crew. While she was living and working on the Space Station there were more than 130 microgravity experiments performed in the areas of human research, biology and biotechnology, physical and materials sciences, technology development and Earth and space sciences. Dr. Walker was the robotics operator during the three contingency spacewalks to remove and replace a failed pump module on the station. She again served as the co-pilot during the Soyuz undock landing, which occurred November 25, 2010. Her entire mission lasted 163 days with 161 of them aboard the station.

Awards/Honors:

Goethe Institute Scholarship for Study Abroad, Rice Fellowship for Graduate Study, Rockwell Sustained Superior Performance Award; seven Group Achievement Awards for work in the International Space Station Program; three Going the Extra Mile Awards for work in the International Space Station Program; and a Space Flight Awareness Award for contributions to the International Space Station Program.

Organizations:

The Ninety-Nines International Organization of Women Pilots.

Pronunciation:

SHAN-un WALL-ker