

# Summary:

Karen L. Nyberg was selected by NASA in 2000. The Vining, Minnesota native holds a Bachelor of Science in Mechanical Engineering from the University of North Dakota; a Master of Science in Mechanical Engineering from the University of Texas at Austin and a Doctorate in Mechanical Engineering also from the University of Texas at Austin. She began as a Co-op in 1991 and worked for NASA in a variety of areas, and holds a patent for work done on Robot Friendly Probe and Socket Assembly. Nyberg has served on two spaceflights, STS-124 and Expedition 36/37, and has accumulated 180 days in space.

# **Personal Data:**

Born on October 7, 1969. Her hometown is Vining, Minnesota. Married. One child. Recreational interests include running, sewing, drawing and painting, backpacking, piano and spending time with her family. Dr. Nyberg's parents, Kenneth and Phyllis Nyberg, still reside in Vining.

### **Education:**

Graduated from Henning Public High School, Henning, Minnesota, 1988. Bachelor of Science in Mechanical Engineering, Summa Cum Laude, University of North Dakota, 1994. Master of Science in Mechanical Engineering, University of Texas at Austin, 1996. Doctorate in Mechanical Engineering, University of Texas at Austin, 1998.

### **Experience:**

Graduate research was completed at The University of Texas at Austin BioHeat Transfer Laboratory where she investigated human thermoregulation and experimental metabolic testing and control, specifically related to the control of thermal neutrality in space suits.

### **NASA Experience:**

Co-op at Johnson Space Center from 1991 to 1995, working in a variety of areas. She received a patent for work done in 1991 on Robot Friendly Probe and Socket Assembly. In 1998, upon completing her doctorate, she accepted a position with the Crew and Thermal Systems Division, working as an Environmental Control Systems Engineer.

Selected as a Mission Specialist by NASA in July 2000, Dr. Nyberg reported for training in August 2000. Following the completion of two years of training and evaluation, she was assigned technical duties in the Astronaut Office Station Operations branch where she served as Crew Support astronaut for the Expedition 6 crew during their six-month mission aboard the International Space Station. A veteran of two spaceflights, Dr. Nyberg served as a Mission Specialist on STS-124 and a Flight Engineer for Expedition 36/37. She served in the Space Shuttle branch, the Exploration branch, and as Chief of the Robotics branch. Dr. Nyberg retired from NASA March 2020.

Dr. Nyberg has accumulated 180 days in space over the course of the two missions.

# ASTRONAUT BIOGRAPHY

# Karen L. Nyberg

# Spaceflight Experience:

STS-124 (May 31 to June 14, 2008). This was the 123rd space shuttle flight, and the 26th shuttle flight to the International Space Station. Discovery was launched from the Kennedy Space Center, Florida, and docked with the space station on June 2 to deliver the Japanese Experiment Module-Pressurized Module (JEM-PM) and the Japanese Remote Manipulator System. STS-124 shuttle astronauts delivered the 37-foot (11-meter) Kibo lab, added its rooftop storage room and conducted three spacewalks to maintain the station and to prime the new Japanese module's robotic arm for work during nine days docked at the orbiting laboratory. STS-124 also delivered a new station crew member, Expedition 17 Flight Engineer Greg Chamitoff. He replaced Expedition 16 Flight Engineer Garrett Riesman, who returned to Earth with the STS-124 crew. The STS-124 mission was completed in 218 orbits, traveling 5,735.643 miles in 13 days, 18 hours, 13 minutes and 7 seconds.

Expedition 36/37 (May 28 to November 10, 2013). Dr. Nyberg, Russian cosmonaut Fyodor Yurchikhin and European Space Agency (ESA) astronaut Luca Parmitano launched aboard the Soyuz TMA-09M from the Baikonur Cosmodrome in Kazakhstan to the International Space Station. They were welcomed aboard by Expedition 35 Commander Pavel Vinogradov and Flight Engineers Alexander Misurkin and Chris Cassidy. During the expedition, the crew completed 166 days aboard the station and 2,656 orbits of the Earth while travelling more than 70 million miles.

# Awards/Honors:

University of North Dakota Honorary Doctorate of Letters (2014); University of Texas Distinguished Alumnus Award (2014); University of North Dakota College of Engineering & Mines Alumni Academy Inductee (2009); University of North Dakota Sioux Award (2009); University of Texas Outstanding Young Engineering Graduate Award (2009); University of Texas Outstanding Young Mechanical Engineer Award (2008); University of North Dakota Young Alumni Achievement Award (2004); Space Act Award (1993); NASA JSC Patent Application Award (1993); NASA Tech Briefs Award (1993); NASA JSC Cooperative Education Special Achievement Award (1994); Joyce Medalen Society of Women Engineers Award (1993-94); D.J. Robertson Award of Academic Achievement (1992); University of North Dakota School of Engineering and Mines Meritorious Service Award (1991 through 1992). Recipient of numerous scholarships and other awards.

### **Pronunciation:**

CARE-in NIGH-burg