

GLOBAL FRIENDSHIP THROUGH SPACE EDUCATION

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ASTRO NEWSLETTER

Welcome! In this Special Edition of Astro Newsletter, we wanted to share with you some brief information about the two Astronauts that will be visiting Space Camp Turkey this summer.

Astronaut Sunita L. Williams will be at Space Camp Turkey during the E-Pal week (July 10-16) and astronaut Dorothy M. Metcalf-Lindenburger will be at the Future Explorers Summit week (August 7-13).

SUNITA L. WILLIAMS (CAPTAIN, USN) NASA ASTRONAUT

PERSONAL DATA: Born September 19, 1965 in Euclid, Ohio, but considers Needham, Massachusetts to be her hometown. Married to Michael J. Williams. Although they have no children, a crazy Jack Russell Terrier named Gorby has added his share of excitement to their lives, as has a Labrador Retriever named Bailey. Recreational interests include running, swimming, biking, triathlons, windsurfing, snowboarding and bow hunting. Her parents, Dr. Deepak and Mrs. Bonnie Pandya, reside in Falmouth, Massachusetts.

EDUCATION: Needham High School, Needham, Massachusetts, 1983. B.S., Physical Science, U.S. Naval Academy, 1987. M.S., Engineering Management, Florida Institute of Technology, 1995.

ORGANIZATIONS: Society of Experimental Test Pilots, Society of Flight Test Engineers, American Helicopter Association.

SPECIAL HONORS: Awarded Navy Commendation Medal (2), Navy and Marine Corps Achievement Medal, Humanitarian Service Medal and various other service awards.



EXPERIENCE: Williams received her commission as an Ensign in the United States Navy from the United States Naval Academy in May 1987. After a six-month temporary assignment at the Naval Coastal System Command, she received her designation as a Basic Diving Officer and then reported to Naval Aviation Training Command. She was designated a Naval Aviator in July 1989. She then reported to Helicopter Combat Support Squadron 3 for initial H46, Seaknight, training. Upon completion of this training, she was assigned to Helicopter Combat Support Squadron 8 in Norfolk, Virginia, and made overseas deployments to the Mediterranean, Red Sea and the Persian Gulf in support of Desert Shield and Operation Provide Comfort. In September 1992, she was the Officer-in-Charge of an H-46 detachment sent to Miami, Florida for Hurricane Andrew Relief Operations onboard USS Sylvania. Williams was selected for United States Naval Test Pilot School and began the course in January 1993. After graduation in December 1993, she was assigned to the Rotary Wing Aircraft Test Directorate as an H-46 Project Officer, and V-22 Chase Pilot in the T-2. While there, she was also assigned as the squadron Safety Officer and flew test flights in the SH-60B/F, UH-1, AH-1W, SH-2, VH-3, H-46, CH-53 and the H-57. In December 1995, she went back to the Naval Test Pilot School as an Instructor in the Rotary Wing Department and the school's Safety Officer where she flew the UH-60, OH-6 and the OH-58. From there, she was assigned to the USS Saipan (LHA-2), Norfolk, Virginia, as the Aircraft Handler and the Assistant Air Boss. Williams was deployed onboard USS Saipan when she was selected for the astronaut program. She has logged more than 3000 flight hours in over 30 different aircraft.

NASA EXPERIENCE: Selected by NASA in June 1998, she reported for training in August 1998. Astronaut Candidate Training included orientation briefings and tours, numerous scientific and technical briefings, intensive instruction in shuttle and International Space Station systems, physiological training and ground school to prepare for T-38 flight training, as well as learning water and wilderness survival techniques. Following a period of training and evaluation, Williams worked in Moscow with the Russian Space Agency on the Russian contribution to the space station and with the first Expedition Crew. Following the return of Expedition 1, Williams worked within the Robotics branch on the station's Robotic Arm and the follow-on Special Purpose Dexterous Manipulator. As a NEEMO2 crewmember, she lived underwater in the Aquarius habitat for 9 days. After her first flight, she served as Deputy Chief of the Astronaut Office. She then supported a long duration mission as Flight Engineer for Expedition 32 and International Space Station Commander for Expedition 33. Williams has spent a total of 322 days in space on two missions; she ranks sixth on the all-time U.S. endurance list, and second all-time for a female. With 50 hours 40 minutes, she also holds the record total cumulative spacewalk time by a female astronaut.

SPACE FLIGHT EXPERIENCE: Expedition 14/15 (December 9, 2006 to June 22, 2007). Williams launched with the crew of STS-116 on December 9, 2006, docking with the International Space Station on December 11, 2006. As a member of the Expedition 14 crew, Williams served as Flight Engineer. While onboard, she established a world record for females with four spacewalks totaling 29 hours and 17 minutes of Extravehicular Activity (EVA). (Astronaut Peggy Whitson subsequently broke the record in 2008 with a total of five spacewalks). Williams concluded her tour of duty as a member of the Expedition 15 crew returning to Earth with the STS-117 crew to land at Edwards Air Force Base, California on June 22, 2007. Expedition 32/33 (July 14 to November 18, 2012).

Williams launched from the Baikonur Cosmodrome in Kazakhstan, along with Russian Soyuz commander Yuri Malenchenko and Flight Engineer Akihiko Hoshide of the Japan Aerospace Exploration Agency, on July 14, 2012. They were welcomed on the International Space Station on July 17, 2012, by NASA Flight Engineer Joe Acaba and Russian cosmonauts, Expedition 32 commander Gennady Padalka and Flight Engineer Sergei Revin. Williams spent four months conducting research and exploration aboard the orbiting laboratory. She landed in Kazakhstan on November 18, 2012, after spending 127 days in space. During their Expedition, Williams and Hoshide performed three spacewalks to replace a component that relays power from the space station's solar arrays to its systems, and repair an ammonia leak on a station radiator. With 50 hours and 40 minutes, Williams once again holds the record for total cumulative spacewalk time by a female astronaut. In addition, Williams, who has spent a total of 322 days in space on two missions, now ranks sixth on the all-time U.S. endurance list, and second all-time for a female astronaut.

DOROTHY M. METCALF-LINDENBURGER NASA ASTRONAUT (FORMER)

PERSONAL DATA: Born in May 1975, in Colorado Springs, Colorado, but considers Fort Collins, Colorado, her hometown. Married Jason MetcalfLindenburger of Pendleton, Oregon, in 2000. They have one child. Her parents are Joyce and Keith Metcalf, who reside in Fort Collins, Colorado. Metcalf-Lindenburger enjoys running marathons, hiking, drawing, singing and playing music.

EDUCATION: Fort Collins High School, Fort Collins, Colorado; Bachelor of Arts, Geology, Whitman College, Washington, 1997 (graduated with honors in her major and cum laude); Teaching Certification, Central Washington University, Washington, 1999.

ORGANIZATIONS: Phi Beta Kappa, Geological Society of America, National Science Teachers Association, International Technology Education Association, National Council of Teachers of Mathematics.

SPECIAL HONORS: Duncan Bonjorni Extraordinary Achievement Award from Central Washington University (2010), Pete Reid Award for Young Alumni from Whitman College (2009), Space Camp Hall of Fame Inductee (2007), VIP for the Vancouver School District (2004), Outstanding Teacher Preparation Candidate at Central Washington University (1999), Geological Society of America (GSA) Field Camp Award (1996) and the following Whitman College Awards: Leedís Geology Award and Order of the Wailaptu, National Association of Intercollegiate Athletes (NAIA) Academic All-American in Cross Country and Track (1995-1996) and NAIA Conference Champion in the 10K (1996).



EXPERIENCE: Five years of teaching Earth Science and Astronomy at Hudson's Bay High School in Vancouver, Washington. Three years of coaching cross-country running at the high-school level and two years of coaching Science Olympiad. Undergraduate research with the KECK Consortium for two summers: Mapping the last glaciations of Russell Creek in Wyoming (1995) and mapping and determining the petrology of the rocks in the Wet Mountain region of Colorado (1996). Both research positions led to publications.

NASA EXPERIENCE: Metcalf-Lindenburger was selected by NASA as a Mission Specialist in May 2004. In February 2006, she completed Astronaut Candidate Training, which 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. Completion of this initial training qualified her for technical assignments within the Astronaut Office and future flight assignment. Metcalf-Lindenburger served as the Astronaut Office Station Branch twig lead for systems and crew interfaces. In 2010, she was a mission specialist on the crew of STS-131 and logged more than 362 hours in space. After her space flight, she worked as a Cape Crusader for the final three shuttle missions. She also supported the Astronaut Office Station Operation Branch as a lead for the provisions, manifests, and stowage twig.

In June 2012, Metcalf-Lindenburger commanded the NASA Extreme Environment Mission Operations (NEEMO) 16. In this underwater habitat, the international crew of four aquanauts and two habitat technicians carried out simulated spacewalks to investigate the techniques and tools that may be used at a Near Earth Asteroid (NEA). Additionally, they operated under a 50-second, one-way communication delay and conducted educational and public live video appearances. Metcalf-Lindenburger retired from NASA on June 13, 2014, to live and work in the Seattle area.

SPACEFLIGHT EXPERIENCE: STS-131 Discovery (April 5 to April 20, 2010), a resupply mission to the International Space Station, was launched at night from the Kennedy Space Center, Florida. On arrival at the station, Discovery's crew dropped off more than 27,000 pounds of hardware, supplies and equipment, including a tank full of ammonia coolant that required three spacewalks to hook up, new crew sleeping quarters and three experiment racks. On the return journey, Leonardo, the MultiPurpose Logistics Module (MPLM) inside Discovery's payload bay, was packed with more than 6,000 pounds of hardware, science results and trash. The STS-131 mission was accomplished in 15 days, 02 hours, 47 minutes and 10 seconds and traveled 6,232,235 statute miles in 238 Earth orbits.