

ASTRONAUT BIOGRAPHY



National Aeronautics and Space Administration

Lyndon B. Johnson Space Center
Houston, Texas 77058

September 2022



Mark T. Vande Hei

(Colonel, U.S. Army Retired) NASA Astronaut

Summary:

Mark T. Vande Hei was selected by NASA in 2009. Born in Virginia then raised in New Jersey and Minnesota, Vande Hei earned a Bachelor of Science in Physics from Saint John's University and a Master of Science in Applied Physics from Stanford University. He was commissioned in the U.S. Army through the ROTC program and served as a combat engineer. In 1999, he became an assistant professor of physics at the United States Military Academy in West Point. After extending the record for the longest single spaceflight in history by an American to 355 days, NASA astronaut Mark Vande Hei returned to Earth in March 2022.

Personal Data:

Vande Hei and his wife, Julie, are the proud parents of two children. He enjoys exercise, backpacking, watersports and reading. His parents, Thomas and Mary Vande Hei, reside in Chanhassen, Minnesota.

Education:

Saint Joseph's High School, Metuchen, New Jersey; Benilde-Saint Margaret's High School, Saint Louis Park, Minnesota, 1985; Bachelor of Science in Physics, Saint John's University, Collegeville, Minnesota, 1989; Master of Science in Applied Physics, Stanford University, 1999.

Experience:

Vande Hei was commissioned through ROTC following graduation from Saint John's University in 1989. After graduating from the Army's Engineer Officer Basic Course and Ranger School, he reported to the 3rd Battalion, 325th Infantry Regiment (Airborne Battalion Combat Team), Caserma Ederle, Italy. His roles there included combat engineer platoon leader, heavy engineer platoon leader, cold-weather-training officer, and support platoon leader. As a combat engineer platoon leader, he served in Iraq during Operation Provide Comfort. In 1994, he reported to the 4th Infantry Division (Mechanized) at Fort Carson, Colorado. While there, Vande Hei served in the staff of the 299th and 4th Engineer Battalions, and then commanded C Company, 4th Engineer Battalion. After completing a Master of Science degree in 1999, he served as an assistant professor in the Department of Physics at the United States Military Academy, West Point, New York. In 2003, he reported to the Army's 1st Space Battalion at Peterson Air Force Base, Colorado. There, he served as an Army space support team leader, then as the battalion's operations officer. As an Army space support team leader, Vande Hei deployed to Iraq for 12 months in support of Operation Iraqi Freedom. Other military training Vande Hei completed includes the Army Air Assault Course, Parachutist Course, German Winter Operations Course, Engineer Officer Advanced Course, Battalion Maintenance Officers' Course, Command and General Staff College and the Space Operations Officer Qualification Course.

NASA Experience:

Vande Hei reported to the Johnson Space Center in July 2006 to serve as a Capsule Communicator (CAPCOM) in the Mission Control Center, Houston. He served as an International Space Station CAPCOM for Expeditions 15 to 20 and

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STS-122, 123, 124, 126 and 127. Vande Hei was selected in June 2009 as one of 9 members of the 20th NASA astronaut class. He completed astronaut candidate training in June 2011, after which he continued to serve as a CAPCOM. From June 2012 to May 2013, he served as the Astronaut Office's Director of Operations in Russia. After returning from his first spaceflight, Vande Hei served as the technical assistant for NASA's Human Exploration and Operations Mission Directorate. He followed that assignment by serving as the assistant to the chief astronaut for extravehicular activity and robotics, until starting training for his second spaceflight.

Spaceflight Experience:

Expedition 53/54 (September 13 through February 28, 2018). Vande Hei, serving as flight engineer 1, launched from Baikonur, Kazakhstan with NASA Astronaut Joe Acaba and Russian Cosmonaut Alexander Misurkin on Soyuz MS-06. During the mission the crew marked the beginning of the first long-term increase in crew size on the U.S. segment of the International Space Station, enabling NASA to double the time dedicated to research and achieve a then record-setting week of research that surpassed 100 hours. During this, his first mission, Vande Hei ventured outside the space station on four spacewalks to perform work that included replacing and lubricating the Latching End Effectors on both ends of the Canadarm2. He returned to Earth after 168 days of in space.

Expedition 65/66 (April 9, 2021 through March 30 2022). Vande Hei, serving as flight engineer 2, launched from Baikonur, Kazakhstan with Russian Cosmonauts Oleg Novitskiy and Pyotr Dubrov on Soyuz MS-18. After 355 days in space, setting the US record for longest continuous spaceflight, he returned to the Baikonur Cosmodrome on Soyuz MS-19 along with crewmates Pyotr Dubrov and Anton Shkaplerov. While on board the International Space Station, he worked to maintain the Station and further its science objectives along with the crews of three Dragon spacecraft and five Soyuz spacecraft.

Vande Hei has spent a total of 523 days in space and has spent 26 hours and 42 minutes conducting spacewalks.

Awards/Honors:

Legion of Merit; Joint Service Commendation Medal; Joint Meritorious Unit Award; Southwest Asia Service Medal; various other campaign and service awards; NASA Achievement Medal; previous captain of the Saint John's Ranger Challenge Team; Doctor of Science, Honoris causa, Saint John's University.

Organizations:

Member of the Veterans of Foreign Wars of the United States, Member of Sigma Pi Sigma, the physics honor society.

Pronunciation:

MARK VAN-duh HI