

ASTRONAUT BIOGRAPHY



National Aeronautics and Space Administration

Lyndon B. Johnson Space Center
Houston, Texas 77058

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E. Michael Fincke

(Colonel, U.S. Air Force, Ret.) NASA Astronaut

Summary:

E. Michael Fincke was selected as an astronaut by NASA in 1996. The Pennsylvania native is the veteran of three spaceflights: Expedition 9 in 2004, Expedition 18 in 2009, and STS-134 in 2011 and is assigned to Expedition 73/74, scheduled to launch on NASA's SpaceX Crew-11 mission in the summer of 2025.

For Expedition 9, Fincke served as Science Officer and Flight Engineer during his six-month stay aboard the International Space Station. While there, he performed four spacewalks. For Expedition 18, Fincke served as ISS Commander, where he and his crew prepared the station for future six-person crews. For STS-134, he served as Mission Specialist and completed three spacewalks.

Col. Fincke has logged more than a year in orbit, with nine spacewalks totaling 48 hours and 37 minutes of EVA time. He is unique in that six of those spacewalks were in the Russian *Orlan* spacesuit. Before his next launch Fincke will have been certified as a *Soyuz* co-pilot/flight engineer, a member of the Space Shuttle flight deck crew as well as a pilot for both *Starliner* and *Crew Dragon*.

Following his extensive work with NASA's Commercial Crew Program developing both the *SpaceX Crew Dragon* and Boeing CST-100 *Starliner* spacecraft, Fincke played a crucial role in Boeing's Crew Flight Test (CFT) program. He served as backup pilot for the CFT mission and prime pilot for the *Starliner-1* mission, contributing significantly to *Starliner's* development through his work in the Avionics and Software Integration Lab (ASIL), focusing on flight software refinement, systems integration, and human-spaceflight interfaces.

Currently, Fincke is assigned as Pilot for NASA's SpaceX Crew-11 mission to the International Space Station, where he will serve as a member of Expeditions 73/74.

Personal Data:

Born March 14, 1967, in Pittsburgh, Pennsylvania, but considers Emsworth, Pennsylvania, to be his hometown. Married to the former Renita Saikia of Houston, Texas. They have three children. In addition to time with his family, Col. Fincke enjoys travel, geology, astronomy, learning new languages and reading. He is conversant in Japanese and Russian. His parents, Edward and Alma Fincke, reside in Emsworth, Pennsylvania. Renita's parents, Rupesh and Probha Saikia, formerly of Assam, India, reside in Houston, Texas.

Education:

Graduated from Sewickley Academy, Sewickley, Pennsylvania, in 1985. He attended the Massachusetts Institute of Technology (MIT) on an Air Force Reserve Officers' Training Corps (ROTC) scholarship and graduated in 1989 with a Bachelor of Science degree in Aeronautics and Astronautics as well as a Bachelor of Science degree in Earth, Atmospheric and Planetary Sciences. This was followed by a Master of Science degree in Aeronautics and Astronautics from Stanford University in 1990. He was awarded an Associate of Science degree in Earth Sciences (geology) from El

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Camino College in Torrance, California, in 1993 and a second Master of Science degree in Physical Sciences (planetary geology) from the University of Houston - Clear Lake in 2001.

Experience:

Col. Fincke graduated from MIT in 1989 and immediately attended a summer exchange program with the Moscow Aviation Institute in the former Soviet Union where he studied cosmonautics. Upon graduation from Stanford University in 1990, he entered the United States Air Force where he was reassigned as a Space Systems Engineer and a Space Test Engineer at Los Angeles Air Force Base after the Euro-NATO Joint Jet Pilot Training program. As a Flight Test Engineer at Edwards and Eglin Air Force Bases, he flew in F-16 and F-15 aircraft. In January 1996, he reported to the Gifu Test Center, Gifu Air Base, Japan, where he was the United States Flight Test Liaison to the Japanese/United States XF-2 fighter program. Col. Fincke has logged more than 2,000 flight hours in over 30 different aircraft types.

NASA Experience:

Selected by NASA in April 1996, Col. Fincke completed two years of training and evaluation. He has served in multiple key roles, including International Space Station Capsule Communicator (CAPCOM), Crew Procedures Team Lead, and member of the Crew Test Support Team in Russia. He served as backup crewmember for Expeditions 4, 6, 13, and 16 and is qualified as a left-seat flight engineer for Soyuz TM/TMA spacecraft. His extreme environment training includes NEEMO 2 (2002, underwater) and CAVES 2012 (ESA, underground).

For over a decade, Fincke has been integral to NASA's Commercial Crew Program. As the Astronaut Office Chief of the Commercial Crew Branch in 2014, he participated in the original Commercial Crew Transportation Capability (CCtCap) contracts award. He has been deeply involved in the development and testing of both SpaceX Crew Dragon and Boeing Starliner spacecraft. In January 2019, he was assigned as Joint Ops Commander for Boeing's Crew Flight Test mission, serving on the prime crew until June 2022, when he was designated as backup pilot for the revised two-person CFT mission.

Spaceflight Experience:

Expedition 9 (April 18 to October 23, 2004). Launched from the Baikonur Cosmodrome aboard Soyuz TMA-4, Col. Fincke served as NASA Science Officer and Flight Engineer. During his six-month stay, he maintained station systems and performed four spacewalks. The mission concluded with a safe landing in Kazakhstan.

Expedition 18 (October 12, 2008 to April 8, 2009). Launched from Baikonur Cosmodrome aboard Soyuz TMA-13. As Commander, Fincke led his three-person crew in preparing the station for future six-person crews and hosted space shuttle crews of STS-126 and STS-119. The mission concluded with a safe landing back in Kazakhstan.

STS-134 (May 16 to June 1, 2011). The final flight of Space Shuttle Endeavour. Fincke served as Mission Specialist 1 on the flight deck, spacewalker, and robotic arm operator. The crew delivered the Alpha Magnetic Spectrometer (AMS) to the International Space Station.

Col. Fincke has accumulated 381 days, 15 hours and 11 minutes in orbit and has completed nine spacewalks totaling 48 hours and 37 minutes of EVA time.

Throughout his career, Fincke has remained at the forefront of testing and developing human-rated spacecraft, leveraging his engineering, flight test, and astronaut experience to contribute to the next era of space exploration.

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Awards/Honors:

Col. Fincke has received numerous awards including two NASA Distinguished Service Medals, three NASA Spaceflight Medals, the first International Space Station Leadership Award, the Defense Superior Service Medal, Legion of Merit, and multiple Meritorious Service Medals. He is a Distinguished Graduate from the U.S. Air Force ROTC, Squadron Officer School and Test Pilot School Programs and received the U.S. Air Force Test Pilot School Col. Ray Jones Award as the Top Flight Test Engineer/Flight Test Navigator in class 93B.

Pronunciation:

E. MY-kull FEEN-k