

# ASTRONAUT BIOGRAPHY



National Aeronautics and Space Administration

Lyndon B. Johnson Space Center  
Houston, Texas 77058

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## Steven L. Smith

Associate Director for International Space Station  
Science Directorate, Ames Research Center  
NASA Astronaut

### Summary:

Steven L. Smith was selected as an astronaut in 1992. The Phoenix native holds a Bachelor degree in Electrical Engineering and two Master's degrees, one in Electrical Engineering and one in Business Administration from Stanford University. A veteran of four spaceflights, STS-68, STS-82, STS-103, and STS-110, Smith has completed 7 spacewalks for a total of 49 hours and 25 minutes in space walk time. This has placed him on the top ten American and World spacewalk duration lists. Currently, Smith works as Associate Director of the International Space Station Directorate, Ames Research Center.

### Personal Data:

Born in Phoenix, Arizona, but considers San Jose, California, to be his hometown. He enjoys flying, scuba diving, basketball, camping and traveling.

### Education:

Graduated from Leland High School, San Jose, California. Received a Bachelor of Science degree in Electrical Engineering, a Master of Science degree in Electrical Engineering, and a Master's degree in Business Administration (MBA). All three degrees are from Stanford University. His Engineering Master's degree focus was on semiconductor fabrication. His MBA focus was on strategic planning and decision making in complex situations and under uncertainty.

### Experience:

Prior to joining NASA, Smith worked for IBM in the Large Scale Integration (semiconductor) Technology group as a technical group lead where he guided a team developing new electron beam lithography processes to fabricate semiconductor masks. As a Hardware Systems Group product manager, he co-led the definition of a telephony product as the liaison between customers and the engineering team. He then co-led the roll out to the sales force.

### NASA Experience:

Smith is a veteran of four space flights covering 16 million miles and seven space walks totaling 49 hours and 25 minutes. His spacewalk time placed him second on the all-time American and third on the all-time World historic lists at the completion of his flying career. He remains in the top ten on both lists. Smith joined NASA in 1989 in the Mission Operations Directorate. As a Payload Officer, his duties included preflight payload integration, in which he worked with spacecraft owners and operators to successfully fly and operate the spacecraft on the space shuttle, and real-time flight controller support in Mission Control. He was selected as an astronaut candidate by NASA in 1992 and then completed one year of astronaut candidate training. He has made hundreds of public appearances for NASA.

In September 1993, Smith became the first member of the 1992 astronaut class to receive a flight assignment. He has served as the Astronaut Office representative for the space shuttle main engines, the solid rocket boosters, the external tank, and shuttle safety. In this capacity, Smith provided the Astronaut Office launch readiness opinion in these critical

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vehicle areas. Smith was also assigned to duties at the Kennedy Space Center for a year and a half as a member of the astronaut support team. The team was responsible for space shuttle prelaunch vehicle checkout, crew ingress and strap-in prior to launch and crew egress post landing. After STS-103, he served as the Deputy Chief Astronaut. In this role he supervised the Astronaut Corps leadership group of 10 veteran Astronauts and managed the daily operations of the 125-member Astronaut Corps and 80 support personnel.

Smith served as the NASA International Space Station Program Liaison to the European Space Agency until mid-2015. As the liaison, Mr. Smith represented NASA on-site in Europe in diplomatic, technical, and business discussions and negotiations. He currently serves as the Associate Director for the International Space Station, Science Directorate, at the NASA Ames Research Center in Silicon Valley. The Ames portfolio of space station payloads includes small deployable satellites, robotic satellites for experiments in the crew cabin, autonomous systems software, astronaut efficiency tools and an extensive array of biology-centered payloads.

### **Spaceflight Experience:**

STS-68 Endeavour (September 30 to October 11, 1994). Smith served as a Mission Specialist aboard the Space Shuttle Endeavour on Mission STS-68 in September 1994. His responsibilities were split between shuttle systems and Space Radar Lab 2 (SRL-2), the flight's primary payload. He was one of two crewmen trained to perform a spacewalk, had one been required.

STS-82 Discovery (February 11 to February 21, 1997). Smith performed three spacewalks as a member of the STS-82 Discovery crew, which serviced the Hubble Space Telescope (HST). On the first spacewalk, Smith, riding the end of the shuttle's robotic arm, installed into Hubble two of the four current refrigerator-sized main instruments: the Space Telescope Imaging Spectrograph (STIS) and the Near Infrared Camera Multi-Object Spectrometer (NICMOS). The crew completed five spacewalks to improve Hubble's capability and to replace degraded equipment.

STS-103 (December 19 to December 27, 1999). Smith returned to Hubble as Payload Commander and led the spacewalk crew for STS-103 in December 1999. Hubble had experienced failures which halted its operation. The flight was moved earlier in order to return Hubble to operations. Smith performed two of the spacewalks and was the first astronaut to complete five spacewalks on Hubble.

STS-110 Atlantis (April 8 to April 19, 2002). As the lead spacewalker of the STS-110 Atlantis crew, which installed the S0 (S-Zero) Truss on the station, Smith performed two of the flight's four spacewalks. The crew spent a week in joint operations with the Expedition 4 crew.

### **Awards/Honors**

Two NASA Distinguished Service Medals (the highest award bestowed by NASA to a federal employee), NASA Outstanding Leadership Medal, NASA Space Flight Medals (4), NASA Exceptional Service Medals (2), Johns Hopkins University President's Medal, American Astronautical Society (AAS) Flight Achievement Award, IBM Outstanding Technical Achievement Award, and IBM Outstanding Community Service Award. Seven-time high school and collegiate All-American in swimming and water polo. Two-time National Collegiate Athletic Association (NCAA) Champion at Stanford in water polo. Captain of the 1980 NCAA Championship team. He is on the Advisory Board of The Positive Coaching Alliance and is a former board member of Special Olympics Texas and The Cousteau Society.

### **Pronunciation:**

STEE-vun SMITH