

# **OFFICIAL BIOGRAPHY**

## **Lt. General Thomas P. Stafford, USAF (Ret.)**

### **NASA Astronaut (Former)**

**PERSONAL DATA:** Born September 17, 1930, in Weatherford, Oklahoma. Married to the former Linda Ann Dishman of Chelsea, Oklahoma. They have two sons, Michael Thomas and Stanislav “Stas” Patten. First marriage was to the former Faye L. Shoemaker. They had two daughters, Dionne Kay and Karin Elaine as well as two grandsons, Thomas P. Stafford II and Andrew Alexi Harrison. Linda has two children from a previous marriage, Kassie Neering and Mark Hill, and four grandchildren: Sloane, Lee, Marcus, and Tara. He enjoys hunting, scuba diving, fishing, weight lifting, Pilates, and swimming.

**EDUCATION:** Graduated from Weatherford High School, Weatherford, Oklahoma; received a Bachelor of Science degree (with honors) from the United States Naval Academy in 1952. In 1958, he then attended the United States Test Pilot School, graduating in 1959, and was awarded the A.B. Honts Award as the outstanding graduate.

In addition, General Stafford is the recipient of many honorary degrees, including doctorate of humane letters, University of Oklahoma; a doctorate of laws from the University of Cordoba, Argentina; doctorate of humane letters, Oklahoma State University; doctorate of communications, Emerson College, Boston, Massachusetts; a Masters and Doctorate of human letters, Southwestern Oklahoma State University, Weatherford, Oklahoma; a doctorate of laws, Western State University, Los Angeles, California; a doctorate of science from Oklahoma City University; a doctorate of aeronautical engineering, Embry-Riddle Aeronautical University, Daytona Beach, Florida; and a doctorate of humanities, Oklahoma Christian College, Edmond, Oklahoma.

**ORGANIZATIONS:** Member, National Academy of Engineering; Fellow of the American Institute of Aeronautics and Astronautics (AIAA); Fellow of the American Astronautical Society; the Society of Experimental Test Pilots; and a member of the Masonic Lodge.

**SPECIAL HONORS:** Congressional Space Medal of Honor; Presidential Medal of Freedom; Wright Brothers Memorial Trophy; Harmon International Aviation Trophy (2x); Federation Aeronautique Internationale Gold Space Medal; American Institute of Aeronautics and Astronautics (AIAA) Chanute Flight Award; National Geographic Society’s General Thomas D. White USAF Space Trophy; Veterans of Foreign Wars National Space Award; National Academy of Television Arts and Sciences Special Trustees “Emmy” Award; Society of Experimental Test Pilots James H. Doolittle Award for Management; Rotary National Award for Space Achievement (RNAASA); National Aviation Hall of Fame; National Astronaut Hall of Fame; the Aerospace Walk of Honor; the State of Oklahoma Hall of Fame; Oklahoma Commerce and Industry Hall of Honor; and selected as the Oklahoma Aviator of the Century.

Awards from the National Aeronautics and Space Administration include NASA’s Distinguished Service Medals (4x), Exceptional Service Medals (2x), and NASA’s Medal for outstanding leadership (one of the agencies highest awards). He served as the Chairman of the Operations Oversight Committee of the first Hubble Telescope Spacecraft Servicing and Repair Mission that corrected the design and manufacturing defect of the instrument, and he received NASA’s Public Service Award for the Hubble Telescope Service and Repair Mission for his tremendous efforts to help save the orbiting telescope.

Military honors include the Air Force Distinguished Flying Cross with one Oak Leaf Cluster, Distinguished Service Medal (4x), Air Force Outstanding Unit Award with one Oak Leaf Cluster, Air Force Commendation Medal, the Air Force Command Pilot Astronaut Wings, the USAF’s Lifetime Achievement Award, and designated as a Distinguished Graduate of the U.S. Naval Academy.

**EXPERIENCE:** General Stafford graduated with honors in 1952 from the U.S. Naval Academy, Annapolis, Maryland, and was commissioned a second lieutenant in the United States Air Force. He

received his pilot's wings at Connally AFB, Waco, Texas in September 1953. He completed advanced interceptor training and was assigned to the 54<sup>th</sup> Flight Interceptor Squadron, Ellsworth AFB, Rapid City, South Dakota. In December 1955, he was assigned to the 496<sup>th</sup> Fighter Interceptor Squadron, Hahn Air Base, Germany, where he performed the duties of pilot, flight leader, and flight test maintenance officer, flying F-86Ds. He attended the USAF Experimental Test Pilot School, and received the A.B. Honts award for outstanding graduate. He became an instructor in flight test training, and specialized academic subjects, establishing basic textbooks and directing the writing of flight test manuals for use by the staff and students. He is co-author of the Pilot's Handbook for Performance Flight Testing and the Aerodynamics Handbook for Performance Flight Testing.

General Stafford was selected among the second group of astronauts in September 1962 by the National Aeronautics and Space Administration (NASA) to participate in Projects Gemini and Apollo. In December 1965, he piloted Gemini VI and performed the first rendezvous in space, and helped develop techniques to prove the basic theory and practicality of space rendezvous. In June 1966, he commanded Gemini IX and performed a demonstration of an early-phase rendezvous that would become standard in later Apollo lunar missions, the first optical rendezvous, and demonstrated a lunar orbit abort rendezvous.

From August 1966 to October 1968, Stafford headed the mission planning analysis and software development responsibilities for the astronaut group for Project Apollo. He was the lead member of the team that helped formulate the sequence of missions leading to the first lunar landing mission. He demonstrated and implemented the theory of a pilot manually flying the giant Saturn V booster into orbit, and the technique for the critical translunar injection maneuver.

In May 1969, Stafford would command the Apollo 10 mission to the moon, piloting the first Lunar Module (LM) into lunar orbit. The highly successful mission was the final full-scale dress rehearsal for a lunar landing that would happen during the Apollo 11 mission just two months later. Stafford flew the LM down to within nine miles of the moon's surface designating the landing ellipse for the first landing, performed the first lunar rendezvous, conducted reconnaissance on future Apollo landing sites, and proved all the necessary elements of the lunar landing, with the exception of the actual landing itself.

During the Apollo 10 reentry, General Stafford and his crew was recognized by the Guinness Book of World Records for reaching the highest speed ever attained by man, when the spacecraft reached a speed of 24,791 statute miles per hour – Mach 37. This ultimate speed record still holds today, and may not be exceeded until an astronaut crew returns from a mission to Mars.

Following his return from the moon, Stafford was assigned as the Chief of the Astronaut Office in June 1969, and was responsible for the selection of flight crews for Projects Apollo and Skylab. He reviewed and monitored flight crew training status, and was responsible for coordination, scheduling, and control of all activities involving NASA astronauts.

In June 1971, General Stafford was named as the Deputy Director of Flight Crew Operations at the NASA Manned Space Flight Center (later known as the Johnson Space Center) in Houston. He was responsible for assisting the center director in planning and implementation of programs for the astronaut group, Aircraft Operations, Flight Crew Integration, Flight Crew Procedures, and Crew Simulation and Training Divisions.

Stafford would become the first general to fly into space when he logged his fourth space flight as Apollo commander of the Apollo-Soyuz Test Project (ASTP) mission, July 15-24, 1975. This mission would be the first international space flight, and would be a joint mission culminating in the historic "first handshake in space" between American astronauts and Soviet cosmonauts. Historians now consider the mission as the beginning of the end of the Cold War, and for his efforts, General Stafford was nominated for the Nobel Peace Prize.

General Stafford was promoted to the grade of Major General in August 1975. He left NASA in November 1975 to assume the command of the Air Force Flight Test Center at Edwards AFB, California. As part of his responsibilities, he also assumed the operational command of the Groom Lake

Test Facility (better known as “Area 51”) in Nevada, the Hill-Dougway-Wendover Test Range in Utah, and the Parachute Test Facility in El Centro, California. During his tenure, he was responsible for the testing oversight of the F-15, YF-16, YF-17 (later to become the F-18), the A-10, B-1A, YC-14, YC-15, C-141B, Air Launch Cruise Missile (ALC), “Have Blue” (the first experimental stealth aircraft), and the safety and operations oversight of the Approach and Landing Test (ALT) Program for the Space Shuttle.

Stafford was promoted to Lt. General in March 1978, and in May 1978 assumed the duties as the USAF Deputy Chief of Staff for Research, Development and Acquisition, HQ USAF, Washington, D.C. In addition to the standard duties of his position, in 1979, General Stafford personally initiated the development of the F-117A stealth fighter program. Stafford then wrote the initial design specifications for, and started the Advanced Technology Bomber development (ATV) Program (later renamed the B-2A Stealth Bomber) even though no statement-of-need or requirements existed. He initiated the Advanced Cruise Missile program, designated as the AGM-129 Stealth Cruise Missile, and started the F-110 Afterburning Turbo-Fan Fighter engine program. He also initiated what would become the roadmap for the Advanced Tactical Fighter (ATF), which would become the F-22A Stealth Fighter. General Stafford retired from the Air Force in November 1979.

By the end of his military and NASA career, General Stafford would become the first member of his Naval Academy Class of 1952 to pin on the first, second and third stars of a General Officer. He has flown six rendezvous in space; logged 507 hours and 43 minutes in space flight time, and wears the Air Force Command Pilot Astronaut Wings. He has flown over 127 different types of aircraft and helicopters, four different types of spacecraft, and rode three different types of boosters into space.

In December 1979, former California Governor Ronald Reagan asked Stafford to join his 1980 presidential campaign team as his Air Force defense advisor, and was on Reagan’s transition team after his election as President in November 1980.

In June of 1990, Vice-President Dan Quayle and the NASA Administrator asked General Stafford to form and become Chairman of a team to independently advise NASA how to carry out President Bush’s Space Exploration Initiative, his vision of permanently returning to the moon, and then go on to explore Mars. Stafford assembled teams of 40 full-time and 150 part-time members from the DOD, DOE, NASA, as well as obtaining inputs from academia, and many industrial groups to conduct the one year comprehensive study. The result was “*America at the Threshold*,” a road map for the next 30 years of the U.S. Manned Space Flight Program. General Stafford and Vice-President Quayle held a joint press conference at the White House in June 1991 to announce the recommendations to the public.

In 1994, the Clinton Administration directed a review of all federally-funded research and development plans of the Executive Branch. General Stafford chaired the committee to review and make recommendations to enhance the efficiency of the R&D initiatives of the NASA Human Exploration Enterprise that included the NASA Centers at JSC, KSC, MSFC and SSFC.

Stafford co-founded the technical consulting firm of Stafford, Burke, and Hecker, Inc. in Alexandria, Virginia. He has served on the Board of Directors of numerous corporations listed on the New York Stock Exchange and the American Exchange. He has served as an advisor to a number of governmental agencies, including NASA and the Air Force Systems Command (later named the Air Force Materials Command).

Stafford would also serve on the National Research Council’s Aeronautics and Space Engineering Board, the Committee on NASA’s Scientific and Technological Program Reviews, and Vice-President Quayle’s Space Policy Advisory Council. He was Chairman of the NASA Advisory Council Task Force for the Shuttle-Mir rendezvous and docking missions, and was Co-Chairman of the Stafford-Covey Space Shuttle Return to Flight task force following the Shuttle “Columbia” accident in 2003.

As of January 2017, General Stafford serves as the Chairman of the NASA Advisory Task Force on ISS (International Space Station) Operational Readiness.