



Daniel C. Brandenstein, Captain, USN (Ret.)
 “Dan”

Date of Designation: 2 May 1967 NA#24796

Dates of Active Duty: September 1965-October 1992

Total Flight Hours: 6,500

Carrier/Ship Landings: Fixed wing: 400

Approximate Flight Hours:

Jet: 5,610 Prop: 100 Rocket: 790 VA: 3,000
 NATC: 400 VX: 100, VT: 200 NASA: 2800

Combat Tours:

Southeast Asia: July 1968 - February 1969
 Sept. 1969 - June 1970

Total Combat Missions: 192

Commands: Space Shuttle Missions

STS – 51G, June 17-24, 1985
 STS – 32, January 9-20, 1990
 STS – 49, May 7-16, 1992, First flight of ENDEAVOUR
 Chief (CO), Astronaut Office, April 1987-October 1992

Combat and Flight Performance Awards:

2 Defense Superior Service Medals
 Legion of Merit
 Distinguished Flying Cross
 Defense Meritorious Service Medal
 17 Air Medals
 2 Navy Commendation Medals with Combat V
 2 NASA Distinguished Service Medals
 4 NASA Spaceflight Medals
 2 NASA Outstanding Leadership Medals
 Legion of Honor - France

Duty Assignment Chronology

9/65-1/66 Aviation Officer Candidate School
 1/66-5/67 Training Command-VT-1, VT-7, VT-4,
 VT-25, VT-26. Student (T-34, T2A, T2B,
 TF9J, F9F, F11).



5/67-6/67 VF 126, Instrument RAG Student (TA4).
 6/67-9/67 VAH-123, RAG Student (A6A).
 9/67-1/68 VA-128, RAG Student (A6A).
 1/68-6/70 VA-196 Fleet Pilot (A6A, A6B).
 6/70-1/71 VX-5 Det O, Evaluation Pilot (A6A, A6B,
 KA6D)
 1/71-10/71 U.S. Naval Test Pilot School, Student (A4,
 F8, T38, T1, B26, T28, OV1, UH1, X26, C54,
 U6).
 10/71-8/74 NATC-Weapons Systems Test, Test Pilot (A3,
 A4, A6A, A6E, EA6A, EA6B, F4, OV1).
 8/74-11/74 VA-128, RAG Student (A6E).
 11/74-9/77 VA-145, Fleet Pilot, A6E, KA6D.
 9/77-6/78 VA-128, Ops Officer/Instructor Pilot (A6E)
 6/78-10/92 NASA, Pilot Astronaut (T38, KC135,
 Gulfstream II, B747, Space Shuttle).

Summary of Significant Career Events

- (1) Two combat tours, VA-196 with 192 combat missions.
- (2) Test pilot with NATC Weapons System Test, flight test and project management of numerous classified electronic warfare systems.
- (3) NASA astronaut pilot on STS-8, the first night launch and landing in Shuttle Program; commander of STS-51G, first international crew (astronauts from France and Saudi Arabia); commander of STS-32 extended duration mission; commander of STS-49 the first flight of ENDEAVOUR.
- (4) Chief, Astronaut Office, led 100+ astronauts in support of NASA Human Space Flight Programs.
- (5) Special Honors: Distinguished Alumnus, University of Wisconsin, River Falls; Honorary Doctor of Engineering, Milwaukee School of Engineering; Honorary Doctor of Science, University of Wisconsin River Falls; recipient of the SETP Iven C. Kincheloe Award; the AIAA Haley Space Flight Award; the Federation Aeronautique Internationale Yuri Gagarin Gold Medal; the American Astronautical Society Flight Achievement Award and Astronaut Hall of Fame.

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Biographical Data

Dan was born January 17, 1943, in Watertown, Wisconsin to Mr. and Mrs. Walter Brandenstein. He married the former Jane A. Wade of Balsam Lake, Wisconsin. They have one daughter, Adelle.

Dan graduated from Watertown High School, Watertown, Wisconsin, in 1961; received a Bachelor of Science degree in mathematics and physics from the University of Wisconsin (River Falls) in 1965.

Dan entered active duty with the Navy in September 1965 and was attached to the Naval Air Training Command for flight training. He was designated a naval aviator at Naval Air Station, Beeville, Texas, in May 1967, and then proceeded to VA-128 for A-6 fleet replacement training. From 1968 to 1970, while attached to VA-196 flying A-6 Intruders, he participated in two combat deployments on board the *USS Constellation* (CV-64) and the *USS Ranger* (CV-61) to Southeast Asia and flew 192 combat missions. In subsequent assignments, he was attached to VX-5 for the conduct of operational tests of A-6 weapons systems and tactics; and to the Naval Air Test Center where, upon graduation from the U.S. Naval Test Pilot School, Patuxent River, Maryland, he conducted tests of electronic warfare systems in various Navy aircraft. He made a nine-month deployment to the Western Pacific and Indian Ocean on board the *USS Ranger* (CV-61) while attached to VA-145 flying A-6 Intruders during the period March 1975 to September 1977. He then transferred to VA-128 as the Operations Officer and an A-6 flight instructor. He has logged 6,500 hours flying time in 24 different types of aircraft and has 400 carrier landings.

Dan was selected for astronaut training by NASA in January 1978 and became an astronaut in August 1979. He was ascent spacecraft communicator (CAPCOM) and a member of the astronaut support crew for STS-1 (the first flight of the Space Shuttle). He was subsequently assigned to the STS-2 astronaut support crew and was the ascent CAPCOM for the second Space Shuttle flight. A veteran of four space flights -- STS-8 (August 30-September 3, 1983), STS-51G (June 17-24, 1985), STS-32 (January 9-20, 1990), and STS-49 (May 7-16, 1992) -- he has logged over 789 hours in space. Following his second space flight, Dan served as the Deputy Director of Flight Crew Operations. Dan served as Chief of the Astronaut Office from April 1987 through September 1992 and retired from NASA and the U.S. Navy in October 1992.

Dan was pilot on STS-8, his first flight, which launched at night from the Kennedy Space Center, Florida, on August 30, 1983. This was the third flight for the Orbiter Challenger and the first mission with a night launch and night landing. During the mission crew members deployed the Indian National Satellite (INSAT-1B); operated the Canadian-built Remote Manipulator System (RMS) with the Payload Flight Test Article (PFTA); conducted medical measurements to understand biophysiological effects on space flight; and activated various earth resources and space science experiments. STS-8 completed 98 orbits of the Earth in 145 hours before

landing at Edwards Air Force Base, California, on September 3, 1983.

On his second mission Dan commanded the crew of STS-51G aboard the Orbiter Discovery, June 17-24, 1985. During this seven-day mission crew members deployed communications satellites for Mexico (Morelos), the Arab League (Arabsat), and the United States (AT&T Telstar). They used the Remote Manipulator System (RMS) to deploy and later retrieve the SPARTAN satellite which performed 17 hours of x-ray astronomy experiments while separated from the Space Shuttle. The crew included international astronauts from France and Saudi Arabia. The mission was accomplished in 112 Earth orbits in approximately 170 hours.

Dan then commanded the crew of STS-32 (January 9-20, 1990). In the longest Shuttle mission to date, crew members aboard the Orbiter Columbia successfully deployed the Syncom IV-F5 satellite, and retrieved the 21,400-pound Long Duration Exposure Facility (LDEF) using the RMS. They also operated a variety of middeck experiments, the IMAX camera and conducted numerous medical test objectives to evaluate human adaptation to extended duration missions. Following 173 orbits of the Earth in 261 hours, the mission ended with a night landing in California.

Dan's final command was Shuttle mission STS-49 (May 7-16, 1992) on the maiden flight of the new Space Shuttle Endeavour. During this mission, the crew conducted the initial test flight of Endeavour, performed a record four EVA's (space walks) to retrieve, repair and deploy the International Telecommunications Satellite (INTELSAT) and to demonstrate and evaluate numerous EVA tasks to be used for the assembly of Space Station Freedom. Additionally, a variety of medical, scientific and operational tests were conducted throughout the mission. STS-49 logged 213 hours in space and 141 Earth orbits prior to landing at Edwards Air Force Base, California, where the crew conducted the first test of the Endeavour's drag chute.

Following his retirement from the US Navy and NASA, Dan joined IBM Federal Systems Company to lead the data management system redesign team for the Space Station redesign effort. Additionally, he was involved in strategy development and Congressional visits in support of critical funding for the Space Station program.

From January 1994 to March 1996, Dan held two positions with Loral Space Information Systems Co. As Director of Program Development, he directed new business development efforts in space systems, safety/quality assurance services and ground transportation systems and the direction of all independent research and development (IRAD) projects. As Director of Quality Assurance, he directed quality programs assuring the highest quality products and services and the ISO 9000 certification effort for Space Shuttle software project.

Dan was the Executive Vice President and Program Manager at Kistler Aerospace Corp. from March 1996 to April 1999.

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Biographical Data continued

He led the entrepreneurial efforts to develop world's first commercial, fully reusable launch vehicle including directing spacecraft design and development. He was the technical lead on financial team that successfully raised over \$300 million dollars in private investments.

Dan served as Vice President and Program Manager for the Mission Support Operations Contract at Lockheed Martin Space Operations from April 1999 to September 2007. In that role, Dan was responsible for the development and sustaining engineering, operations and maintenance of the Mission Control Centers and Integrated Planning System at the Johnson Space Center, supporting the human space flight programs.

Currently, Dan is the Executive Vice President and Chief Operating Officer of United Space Alliance, LLC. United Space Alliance is a leader in space operations with extensive experience in all aspects of the field. Headquartered in Houston, USA has 10,000 employees working in Texas, Florida and Alabama providing its broad range of processing, maintenance and operations capabilities to NASA's Space Shuttle, International Space Station and Constellation programs as well as to space operations customers in the commercial and international sectors.