

## C. GORDON FULLERTON



C. Gordon Fullerton is the Chief Research Pilot at National Aeronautics and Space Administration's Dryden Flight Research Center, Edwards, California. His assignments include a variety of flight research and support activities piloting NASA's B-52 launch aircraft, the 747 Shuttle Carrier Aircraft (SCA), and other multi-engine and high performance aircraft.

Fullerton, who logged more than 380 hours in space flight, was a NASA astronaut from September 1969 until November 1986 when he joined the research pilot office at Dryden. In July 1988, he completed a 30-year career with the U.S. Air Force and retired as a Colonel. He continues in his position of research pilot as a civilian.

Fullerton was project pilot on the NASA/Convair 990 aircraft which had been modified to test space shuttle landing gear

components.. As project pilot on the B-52 launch aircraft, Fullerton was involved in six air launches of the commercially developed Pegasus space launch vehicle. He was the project pilot on the Propulsion Controlled Aircraft program and has successfully landed both a modified F-15 and an MD-11 transport with all control surfaces fixed, using only engine thrust modulation for control.

Fullerton has been project pilot on a number of other research programs at Dryden. Among them are the C-140 Jetstar Laminar Flow Control; F-111 Mission Adaptive Wing; F-14 Variable Sweep Flow Transition; Space Shuttle drag chute and F-111 crew module parachute tests with the B-52; and X-29 vortex flow control.

With over 16,000 hours of flying time, Fullerton has piloted 135 different types of aircraft, including full qualification in the T-33, T-34, T-37, T-38, T-39, F-86, F-101, F-104, F-106, F-111, F-14, F-15, X-29, KC-135, C-140, B-47, and DC-8. He currently flies the F/A-18, B-52H, B-747, T-38, C-20A and T-34C.

Fullerton graduated from U.S. Grant High School, Portland, Oregon. He received Bachelor of Science and Master of Science degrees in Mechanical Engineering from the California Institute of Technology, Pasadena, California, in 1957 and 1958, respectively.

Fullerton entered the U. S. Air Force in July 1958 after working as a mechanical design engineer for Hughes Aircraft Co., Culver City, California. After primary and basic flight school, he was trained as an F-86 interceptor pilot, and later became a B-47 bomber pilot at Davis-Monthan AFB, Ariz. In 1964 he was chosen to attend the Air Force Aerospace Research Pilot School (now the Air Force Test Pilot School), Edwards AFB, California. Upon graduation he was assigned as a test pilot with the Bomber Operations Division at Wright-Patterson AFB, Ohio. In 1966 Fullerton was selected for and served as a flight crew member for the Air Force Manned Orbiting Laboratory program until its termination in 1969.

After assignment to the NASA Johnson Space Center as an astronaut, Fullerton served on the support crews for the Apollo 14, 15, 16, and 17 lunar missions.

In 1977, Fullerton was assigned to one of the two two-person flight crews which piloted

the Space Shuttle prototype Enterprise during the Approach and Landing Test Program at Dryden that same year. He participated in two of the three “captive active” and three of the five “free flight” approach and landing tests.

Fullerton was the pilot on the eight-day STS-3 Space Shuttle orbital flight test mission Mar. 22-30, 1982. Launched from the Kennedy Space Center, Florida., the mission landed at Northrup Strip, White Sands, New Mexico. He was commander of the STS-51F Spacelab 2 mission, launched from the Kennedy Space Center, Florida, on July 29, 1985, ending August 6, 1985, with a landing at Edwards AFB., Edwards, California.

The special awards and honors Fullerton has received are numerous. They included the Iven C. Kincheloe Award from the Society of Experimental Test Pilots in 1978; NASA Distinguished and Exceptional Service Medals; the Certificate of Achievement Award from the Soaring Society of America, and the Ray E. Tenhoff Award from the Society of Experimental Test Pilots in 1992 and 1993, and Aviation Week and Space Technology Laurels awards for 1990 and 1995. Fullerton, inducted into the International Space Hall of Fame in 1982, and into the Astronaut Hall of Fame in 2005, is a Fellow of the Society of Experimental Test Pilots, and a Fellow of the American Astronautical Society,

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A note from “Gordo”:

Since my subject is shuttle flight test, here is a list of shuttle systems for which I had a part in initial testing:

1. Orbiter controls and displays development and testing in a variety of engineering mockups and simulations
2. Orbiter Aeroflight Simulator, the first Shuttle sim, used for ALT
3. Shuttle Training Aircraft as shuttle pilot
4. OV 101, the Enterprise, during the Approach and Landing Test series
5. Shuttle Mission Simulator
6. OV 102, the Columbia, as PLT on STS3
7. Plasma Diagnostic Package, flown on STS3 and STS51F
8. Remote Manipulator System, first used to grapple and maneuver a payload on STS3
9. The Instrument Pointing System, first used on STS51F
10. The Spacelab 2 astronomy instrument suite