



14 JUNE 2018 2 p.m. Schriever Courtyard Space & Missile Systems Center Los Angeles Air Force Base, California

Schriever Wall of Honor

In 2007, the Air Force Association's Schriever Chapter 147, with support from industry partners, sponsored and commissioned the Statue of General Bernard A. Schriever that you see before you. In November 2007, the Space & Missile Systems Center dedicated the Statue and Wall as the General Schriever Memorial. The 60th SMC Anniversary in 2014 was chosen as the initial occasion to recognize some of the earliest pioneers who have made tremendous contributions to our community by adding their names to the Schriever Wall of Honor. Every year additional pioneers are chosen to have their names added to the Schriever Wall of Honor. The 2018 Honorees are Mr. James R. Dempsey, Maj Gen John E. Kulpa, Jr., Lt Gen Forrest S. McCartney, Mr. Hideyoshi Nakamura, Col Albert J. Wetzel, and Dr. James B. Woodford, Jr.



General Schriever Memorial Space & Missile Systems Center Los Angeles Air Force Base, California

Mr. James R. Dempsey 4 October 1921 – 15 April 2014



James R. Dempsey enrolled at the University of Alabama prior to attending West Point. He served as a P-38 reconnaissance pilot in Europe during World War II. He remained in the Air Force after the war and pursued higher engineering degrees at the University of Michigan. He served as Chief of Projects in the Guided Missile Directorate, USAF Headquarters, and later as Chief of Projects and Operations Officer at the USAF Missile Test Center at Cape Canaveral, FL.

In 1953, then-Colonel Dempsey was identified by government leadership as an ideal managerial candidate for the intercontinental ballistic missile program. Convair subsequently selected Dempsey for the role, which required him to leave the service. The massive Atlas project encompassed 30,000 employees and another 60,000 subcontractors. Although it saw only brief service as an ICBM, Atlas became the basis of a space launch vehicle family that remains in operation. Early successes included the first successful use of Atlas as a launch vehicle for Project SCORE and the adaptation of Atlas for the manned Mercury and Gemini programs.

In 1965, Dempsey was named president of Convair. He departed for the Avco Corporation the following year, becoming vice president of its Government Products Group. He stayed there until 1975, overseeing flight of the company's Apollo capsule heat shield and Minuteman reentry vehicles. Thereafter he served on the boards of several corporations and mutual funds until retiring in 1994.

Maj Gen John "Jack" E. Kulpa, Jr. 11 May 1929 – 12 March 2018



General Kulpa entered the U.S. Military Academy at West Point, NY, in 1946. He graduated in 1950 with a Bachelor's Degree in Military Engineering. After flight training, he completed multiple assignments to reconnaissance and bomber units worldwide. The general subsequently earned a Master's Degree in Aeronautical Engineering from the Air Force Institute of Technology in 1957.

Following completion of Air Command and Staff College in 1963, General Kulpa joined Space Systems Division at Los Angeles Air Force Station as a project manager. In 1965, he was named the second system program director for the Defense Meteorological Satellite Program (DMSP).

General Kulpa graduated from the National War College in 1969. He commanded the Air Force Avionics Laboratory, and served as deputy for engineering at Aeronautical Systems Division. The general was subsequently assigned to the Office of the Secretary of the Air Force in Washington, DC, as the Deputy Director, Office of Space Systems. He became the director in 1973. Following a tour as principal deputy for plans to the Deputy Director of Central Intelligence, he was named the Director of Special Projects, Office of the Secretary of the Air Force, in 1975. He assumed the duties of deputy commander for space operations in 1980. In that capacity, General Kulpa oversaw the DoD components of the first Space Shuttle Missions. He retired from service 1 April 1983.

Lt Gen Forrest S. McCartney 23 March 1931 – 17 July 2012



General McCartney received a Bachelor's Degree in Electrical Engineering from the Alabama Polytechnic Institute in 1952. He received his commission as a distinguished graduate of the school's ROTC program. After earning a Master's Degree in Nuclear Engineering from the Air Force Institute of Technology in 1955, General McCartney served as a project officer at the Special Weapons Center, Kirtland AFB, NM.

In 1959, General McCartney joined the newly formed Satellite Control Facility at Sunnyvale, CA, as a satellite controller. He subsequently worked as a project officer on the Titan III program at the Office of Space Activities, Headquarters Air Force Systems Command at Andrews AFB, MD.

The general was eventually assigned to the Space and Missile Systems Organization (SAMSO) at Los Angeles AFS in 1974. He served as the Air Force Satellite Communication Systems Program Director, Fleet Satellite Communications Systems Program Director, and the Deputy for Space Communications Systems. General McCartney moved to Norton AFB, CA, in 1979 as vice commander of the Ballistic Missile Office. He assumed command of the Ballistic Missile Office and directorship of the M-X program the following year. General McCartney was named vice commander of the Space Division in 1982. In 1983, he assumed command of Space Division and served as vice commander, Space Command. Upon activation of the U.S. Space Command in 1985, he was redesignated commander of the Space Division. General McCartney retired in August 1987.

Mr. Hideyoshi Nakamura 11 May 1924 – 31 August 2015



Hideyoshi Nakamura earned a Bachelor's Degree and Master's Degree in Mechanical Engineering from the University of Minnesota.

Mr. Nakamura initially joined The Aerospace Corporation in June 1961 as a member of the Technical Staff in the Propulsion Department, Systems Research and Planning Division. He had previously worked for General Dynamics/Convair as a Senior Group Engineer and for the NASA Lewis Flight Laboratory as a Research Scientist.

Mr. Nakamura held a number of positions at The Aerospace Corporation, including directorships of the Data Systems Office, Subsystems Office, and Advanced Concepts Office. He also served as Senior Engineer, and later Senior Director, of the Plans and Systems Architecture Office. In 1968, Mr. Nakamura co-authored the *Navigation Satellite Study* with James B. Woodford Jr. The publication, which came to be known as the Woodford-Nakamura Report, explored concepts and architecture that ultimately led to the development of GPS.

Col Albert John "Red" Wetzel

29 December 1917 – 26 December 2009



Colonel Albert J. "Red" Wetzel graduated from Tulane University in 1939 with a Bachelor's Degree in Electrical Engineering. Called to active duty in December 1940, Colonel Wetzel completed pilot training and subsequently served as a project officer and test pilot in the Special Weapons Branch of Materiel Command at Wright Field, OH.

He earned a Master's Degree in Aeronautical and Astronomical Engineering from The Johns Hopkins University in 1950. After several years of contemplating missile and space-related topics, Colonel Wetzel directed the Titan (WS 107A-2) Intercontinental Ballistic Missile Program from its concept stage to operational readiness. His leadership resulted in the decision to make a complete configuration change for Titan II, rather than rely on incremental changes in Titan I. Improvements in Titan II led to its successful use as a launch vehicle for the manned Gemini program and enabled the development of future heavy-lift configurations associated with Titan III and Titan IV.

Colonel Wetzel subsequently served as Executive Assistant to the Commander of Ballistic Systems Division; Executive Director of the Air Force Council; and Director of Strategic Programs in the Office of the Under Secretary of Defense for Research and Engineering. He retired from active duty in 1965 but remained a contributor to the Rocket and Space Panel of the President's Science Advisory Board until 1971.

Dr. James B. Woodford, Jr. 27 February 1928 – 25 April 2002



Dr. James B. Woodford, Jr. received his Bachelor's Degree, Master's Degree, and Doctorate in Electrical Engineering from Carnegie Tech in 1948, 1949, and 1950.

Prior to joining The Aerospace Corporation in 1960, Dr. Woodford was associated with Space Technology Laboratories as Staff Engineer in their Advanced Systems Planning Division. He entered industry from academia after serving as Associate Professor of Electrical Engineering and Assistant Department Head at the Carnegie Institute of Technology.

Dr. Woodford held a number of positions at The Aerospace Corporation, including Associate Group Director of the Navigation-Communications Systems Directorate, Associate Group Director of the Advanced Orbital System Directorate, and Principal Director of the Government Support Division. In 1968, Dr. Woodford co-authored the *Navigation Satellite Study* with Hideyoshi Nakamura. The publication, which came to be known as the Woodford-Nakamura Report, explored concepts and architecture that ultimately led to the development of GPS.