

*Schriever Wall of Honor
Ceremony*



JUNE 8, 2017

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 2017 Honorees are Maj. Gen. Joseph S. Bleymaier, Col. Edward F. Blum, Gen. Samuel C. Phillips, Dr. Eberhardt Rechtin, Col. Quenten A. Riepe, and Dr. Adolf K. Thiel.



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

Maj. Gen. Joseph S. Bleymaier



Maj. Gen. Joseph S. Bleymaier dedicated his career to providing access to space for the nation's largest and highest priority military and civilian payloads. In 1958, he was assigned to the Air Force Ballistic Missile Division, SMC's ancestor, as deputy commander for ballistic missiles. There he managed the development of propulsion, guidance, and reentry systems for the Atlas, Titan, and Minuteman, the first liquid- and solid-propellant Air Force ICBMs.

In 1961, he became deputy for launch vehicles, converting liquid-fueled missiles to space launchers and performing pioneering work on the development of standardized launch facilities. During 1963-1965, he managed the Air Force's portion of NASA's Ranger missions designed to take photographs of the moon using Air Force Atlas Agena launchers, and Project Mercury, NASA's first manned program, which used Atlas launchers for the orbital missions. Later, as deputy commander for manned systems, he led the Air Force's support to NASA's second manned program, Project Gemini, which employed the Air Force's Atlas and Titan II launchers, as well as the orbiting Agena Target Vehicle.

Bleymaier directed the development of the world's first extremely large solid rocket motor program and the Titan III launch vehicle, which merged in the mid-1960s to create the nation's first heavy-lift space launcher. For many years, the Titan III provided the only access to space for large military payloads and civilian interplanetary missions. After serving as the commander of the Western Test Range, he was assigned as the deputy director of the Manned Orbiting Laboratory in 1967, leading the Air Force's effort to develop a manned platform in space until it was canceled in 1969.

Col. Edward F. Blum



Col. Edward F. Blum was an important part of the first Air Force satellite program, developing the spacecraft portion of the program into a vital and versatile instrument for the first generation of American space efforts. His space career started in 1957, when he became the director of engineering for the propulsion and spacecraft system for the first military satellite program, then known as the Advanced Reconnaissance Program or WS-117L.

In 1958, when WS-117L was divided into several separate programs, Blum continued to manage the development of the upper stage and spacecraft, known by then as Agena. He oversaw the first military satellite propulsion system, attitude control, stabilization, electrical power, and communications. He also developed the first system for recovering payloads from space, including the capsule ejection and deorbit technique and the aircraft recovery system. During its first successful launches in 1959-1960, the Agena became the world's first three-axis stabilized spacecraft, the first polar-orbiting spacecraft, the first spacecraft to eject recoverable capsules from orbit, and the first spacecraft to be restarted in orbit.

Blum developed three progressively more capable versions of the Agena, which provided launch and operational functions on orbit for over 360 military and civilian spacecraft for the first 30 years of American space flight. They supported Air Force space programs such as Discoverer/Corona reconnaissance satellites, MIDAS infrared detection satellites, SAMOS reconnaissance satellites, and Vela nuclear detection satellites; NRO satellites such as Gambit; and NASA exploratory missions such as the Ranger lunar missions, the Mariner missions to Mars, Venus, and Mercury, the Lunar Orbiter, and the Gemini orbital rendezvous missions.

Gen. Samuel C. Phillips



Gen. Samuel C. Phillips exemplified the leadership in missile and space programs that led to the Air Force's preeminence in those fields, and he brought the Air Force's managerial expertise to civilian space programs.

He was a highly decorated fighter pilot in World War II. After a master's degree in electrical engineering, he participated in atomic tests and missile programs during the early 1950s. Under the Strategic Air Command, he helped organize the basing of Thor IRBMs in England in 1958-1959, the first operational deployment of U.S. strategic missiles. After being assigned to the Air Force Ballistic Missile Division, he directed the Minuteman I ICBM program during 1959-1963, completing the development and deployment of the world's first solid-propellant strategic missile. Afterward, he served as vice commander of Ballistic Systems Division.

When NASA's manned lunar landing program, Project Apollo, became a national priority, it was clear that it would benefit from experience in the successful management of very large-scale development programs. At NASA's request, Phillips was reassigned in 1964 to lead the team of government personnel and contractors that successfully placed the first humans on the moon in 1969.

He was assigned in 1969 to command the Space and Missile Systems Organization, where he oversaw the development of the Minuteman III, still the most important U.S. land-based strategic deterrent, as well as the Air Force's participation in the Space Transportation System and the experimental efforts that led to GPS.

In 1972, he became the director of the National Security Agency and, in 1973, the commander of Air Force Systems Command. After his retirement from the Air Force, he directed TRW's Defense Systems Group.

Dr. Eberhardt Rechtin



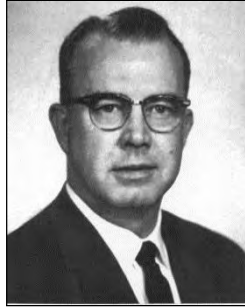
Dr. Eberhardt Rechtin brought his creative genius in research and engineering to many academic institutions and government agencies. He spent his early career at the Jet Propulsion Laboratory during 1949-1967 under the space and missile pioneer, Dr. William H. Pickering. While there, he became a leading expert on telemetry, tracking, and communications, applying his research to both missile guidance and early satellite telecommunications. His major contributions to NASA's worldwide tracking and communications system for distant space probes caused him to be regarded as the father of the agency's Deep Space Network.

During 1967-1972, he served as the director of DoD's Advanced Research Projects Agency, leading research into exploratory military research programs, including missile defense. He also served as Assistant Secretary of Defense for Telecommunications, developing policies for secure satellite telecommunications and survivability, among other priorities in defense communications.

In 1977, Dr. Rechtin was selected as the second president of The Aerospace Corporation, providing technical support for the space programs of SMC's organizational predecessors. He supervised the corporation's close and critical involvement in the development of the Global Positioning System, the Defense Support Program, the third generation of the Defense Satellite Communications System, and more advanced versions of the Defense Meteorological Satellite Program. During the 1980s, he also oversaw support for space programs contributing to the Strategic Defense Initiative for defense against ballistic missiles. He retired from Aerospace in 1987, after a crucial decade of growth.

Afterward, he became a professor of engineering at the University of Southern California. He wrote ground-breaking books on systems architecture design and is recognized as an eminent pioneer in the field.

Col. Quenten A. Riepe



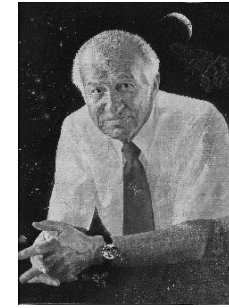
Col. Quenten A. Riepe developed many of the basic concepts, missions, and early systems for Air Force space programs. He was the first director of the first Air Force satellite development program, the Advanced Reconnaissance System, later called WS-117L, when it was managed at Wright Air Development Center during 1952-1955. He oversaw the first RAND Corporation studies of a reconnaissance satellite and the first feasibility studies of the world's first satellite with a military mission. He also directed the first detailed studies of spacecraft subsystems.

When the satellite program was transferred to the Western Development Division, SMC's predecessor, in 1955, Riepe transferred with it as head of plans and programs for what became the Air Force's Discoverer program and the NRO's Corona program. Among other accomplishments, he laid the groundwork for launch, tracking, control, and other terrestrial support systems at Vandenberg AFB.

In 1959, he was reassigned as the first director of the first successful satellite-based infrared detection system, the Missile Defense Alarm System (MIDAS), under the Air Force Ballistic Missile Division, SMC's ancestor. He later directed early efforts to develop space-based systems for electronic intelligence. As his next achievement, he developed the first operational Air Force antisatellite system, known as Program 437, using Thor missiles with nuclear warheads. An alternate payload which successfully carried out photographic inspection of satellites in orbit was also launched for the first time under Riepe's leadership.

Riepe was appointed vice commander of the 6595th Aerospace Test wing, which conducted all space and missile launches on the Western Test Range, in 1964. He retired from the Air Force in 1966.

Dr. Adolf K. Thiel



Dr. Adolf K. Thiel was a vital part of U.S. missile and space programs from their beginning. During World War II, he helped to develop the V-2 missile at Peenemunde with Dr. Wernher von Braun. After the war, the U.S. Army brought him to White Sands, New Mexico, during Operation Paperclip to conduct further research on the V-2. Dr. Thiel participated in the earliest efforts to launch space probes using V-2 rockets and early upper stages. He later moved with Von Braun's team to the Redstone Arsenal in Huntsville, Alabama, where he supervised the early development of the Army's Redstone IRBM.

In 1955, he joined Space Technology Laboratories (STL), a subsidiary of the Ramo-Wooldridge Corporation, where he played a prominent role in the development of early space and missile programs for the Western Development Division and the Air Force Ballistic Missile Division, SMC's earliest ancestors. He designed and directed the successful development of the Thor IRBM, as well as its conversion to the first Air Force space launch vehicle. He was also part of STL's research and development team for the earliest Air Force space launches, including the Pioneer program's lunar and interplanetary missions.

When Ramo-Wooldridge became TRW in 1958, Dr. Thiel became its director of space projects. He oversaw the development of Pioneer 5 and later missions during the 1960s and 1970s to study the space environment, as well as Explorer 6 and later missions to study the earth environment. He also oversaw the development of critical military satellites such as the first operational nuclear and missile detection systems. He retired from TRW in 1980 as a senior vice president.