

**Colonel Albert J. Wetzel
Inducted 2003**



Colonel Albert J. “Red” Wetzel was born on 29 December 1917 in New Orleans, Louisiana. He 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, by late 1943, was serving as a project officer and test pilot in the Special Weapons Branch at Materiel Command headquarters, Wright Field, where he worked on problems related to glide bombs, navigation, and remote control. Two of his technical papers in 1944—“Error Analysis of Guidance Systems of Rocket and Space Systems Utilizing Single and Two Degree of Freedom Gyroscopes and Associated Platforms” and “Analysis of Certain Technical Considerations in the Design, Development and Use of Ballistic Rockets”—presaged his later contributions to missile and space technology.

Colonel Wetzel served as chief project engineer for Matador, the Air Force’s first ground-launched cruise missile, during 1947-1948. He earned a master’s degree in aeronautical and astronomical engineering from The Johns Hopkins University in 1950, became Executive Officer to President Harry Truman’s guided missile advisor, K.T. Keller, in 1952, served as USAF executive to Assistant Secretary of Defense for Applications Engineering Frank D. Newbury during 1953-1955. Even as a Strategic Air Command bomb squadron, and deputy wing, commander during the mid-1950s, he contemplated missile and space-related topics: “Potential of Manned and Unmanned Space Vehicles,” “Design of Surface to Surface Rockets of Intercontinental Range”; and “Capabilities and Use of Space Vehicles for Strategic Reconnaissance.”

From 1958 to 1961, 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. Among the most significant accomplishments during Colonel Wetzel's tenure as Titan Program Director were: a self-contained, all-inertial guidance system for Titan II, unlike Titan I, that allowed a "salvo" launch of the entire force; rapid operational response through use of storable, hypergolic propellants instead of cryogenic fuels; launch from hardened, underground silos; a system involving two main thrusters that allowed for "steering" the missile in a novel fashion; and much greater "throw weight" to permit delivery of heavier thermonuclear payloads anywhere on the globe, as well as launch of NASA's manned Gemini spacecraft into Earth orbit. The legacy of Titan II included a series of even more powerful variants—III, 23B, 24B, 34B&D and IV—that permitted the launch of large space platforms into the 21st century.

As Executive Assistant to the Commander of Ballistic Systems Division during 1961-1962, Colonel Wetzel oversaw numerous studies or surveys related to ICBMs and established an advisory group of nationally prominent scientists. Then, as Executive Director of the Air Force Council, he crafted a cohesive realignment of Air Staff technical and production functions associated with procurement of weapon systems. In his final assignment as a USAF officer, Colonel Wetzel served as Director of Strategic Programs in the in the Office of the Under Secretary of Defense for Research and Engineering. He retired from active duty in 1965 and returned to Tulane University where he held a variety of appointments until 1995 when he received the title Vice President Emeritus. Meanwhile, during 1965-1971, he served on the Rocket and Space Panel of the President's Science Advisory Board. Colonel Wetzel died on 26 December 2009.