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# Robert H. Widmer, Designer of Military Aircraft, Dies at 95

By DOUGLAS MARTIN JULY 2, 2011

The day the legendary test pilot Chuck Yeager shattered the sound barrier in 1947, Robert H. Widmer marched into his boss's office at the Consolidated Vultee Aircraft Corporation in Fort Worth to say he wanted to design the world's first supersonic bomber. He was told to stick to the contracts the company was already fulfilling.

Mr. Widmer, an aeronautical engineer, nonetheless threw himself into designing the plane on his own time. Two years later, when the Air Force asked for bids to build a bomber that could fly at extreme altitudes and supersonic speeds, he had all but finished.

Convair, as the company was called, won the contract for the bomber, the B-58, with Mr. Widmer's design. He named the plane the Hustler. Able to fly as high as 15 miles and at a speed twice the speed of sound, it carried some of the most sophisticated military systems yet developed. The Russians had nothing that came close. Bomber pilots passed up transfers with pay raises and promotions just to fly it, Popular Science reported.

Mr. Widmer, whose family said he died in Fort Worth on June 20 at the age of 95, would go on to lead the design and development of major aircraft like the F-111 "Aardvark" and the F-16 "Fighting Falcon" as well as the Tomahawk

cruise missile, helping to enforce the cold war strategic balance known as mutual assured destruction. His daughter, Gail Widmer Landreth, said he saw lethal airplanes as instruments of peace.

When the American Institute of Aeronautics and Astronautics presented Mr. Widmer with its Reed Aeronautics Award for 1983, the organization said he had pioneered “the eras of supersonic cruise and fly-by-wire computerized flight control.”

Well into his 80s, Mr. Widmer continued to go to the office every day as the company became General Dynamics, then Lockheed, then Lockheed Martin. In his later years he worked on the sort of unmanned aircraft that became integral to American warfare in Iraq and Afghanistan.

A short man with a high-pitched voice, he also continued to display the salty personality for which he was known. “He swore like a sailor,” said Armand Chaput, who worked on advanced aircraft design at General Dynamics and now teaches at the University of Texas. “People were afraid of him, but they really respected him. He could shred you.”

Robert Henry Widmer was born in Hawthorne, N.J., on May 17, 1916. Attending Rensselaer Polytechnic Institute, he built a small racing biplane as his thesis project and was named the outstanding aeronautical engineer in his class. He earned a master’s degree at the California Institute of Technology but dropped his plans to earn a Ph.D. to join Convair at its headquarters in San Diego, where he first worked on marine aircraft.

Transferred to the company’s main aircraft factory in Fort Worth, he honed the wing of the B-24 “Liberator,” the most-produced American military aircraft. When Convair moved on to the B-36 “Peacemaker,” Mr. Widmer presided over wind-tunnel tests.

The B-36 went on to become the Air Force’s largest bomber ever and a strategic stalwart in the 1950s. But it experienced repeated problems, prompting Stuart Symington, secretary of the Air Force, to pay a visit to Fort Worth, as The Dallas Morning News recounted the episode in 1997. After being lobbied by Mr. Widmer, Mr. Symington

decided that the program should continue and nervously phoned his decision to Defense Secretary James Forrestal. Mr. Symington then asked Mr. Widmer and two Air Force officers to stand and join hands.

“If this damn airplane doesn’t make it,” Mr. Symington told them, “we’re going to walk either east or west until our hats float.”

A decade later, similar mechanical problems dogged the F-111, a medium-range attack plane. For a time Mr. Widmer flew to Washington every Saturday to confer with Defense Secretary Robert S. McNamara about ironing out the flaws, Mr. Chaput said.

Mr. Widmer later defied his bosses by secretly pushing ahead on the F-16, a lightweight fighter, even though there seemed to be no market for it, Mr. Chaput said. Mr. Widmer hid prototypes in hangars. Several years later, the Pentagon decided it wanted such a fighter, and General Dynamics, thanks to Mr. Widmer’s surreptitious efforts, was ready.

Having been initially threatened with dismissal for insubordination, Mr. Widmer was instead promoted to vice president for science and engineering for all of General Dynamics. Among his later projects was the Tomahawk cruise missile, which was used extensively in the Persian Gulf war and the Iraq war, and a more fuel-efficient engine for automobiles that carmakers declined to buy.

In addition to his daughter, Mr. Widmer is survived by his wife of 65 years, the former Jeanette Billing; his son, Robert; three grandchildren; and two great-grandchildren.

Mr. Widmer often worked on highly classified projects, none more secret than his proposed spy plane “Fish” (the letters stood for First Invisible Super Hustler). In a 1999 television interview, Mr. Widmer said an early concept for the plane was to build it in the shape of a disc, a statement that has since reverberated on U.F.O. Web sites. Some of the stealth technology found its way into later airplanes.

Mr. Widmer was so valuable to the government that for years the C.I.A. positioned agents in parked cars at each end of the Fort Worth street where he and his family lived, his son said. Mr. Widmer himself told of being instructed to keep a low profile — to make airline reservations under a fake name and to meet agents in half-finished buildings.

The ultrasecret projects he worked on were called black projects. “I’m talking about the extreme black,” Mr. Widmer said. “I have lived the extreme black.”

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