

# Project Pioneer: Dick Austin



“I am not being humble when I say I’ve literally stood on the shoulders of giants at AEDC, people who were the very best in their fields,” said AEDC Fellow Dick Austin, looking back on the long and sometimes difficult road he has traveled to a successful career.

Mr. Austin’s 35 years at AEDC were marked by a number of outstanding accomplishments, highlighted by his visionary leadership of the center’s Propulsion Test and Evaluation Directorate.

He was the deputy director from 1980 until 1992, serving as the director until his retirement. He played a crucial role in forging government-industry alliances for testing and evaluation of large commercial turbofan engines.

Mr. Austin’s efforts led to a 20-year alliance with United Technologies Pratt & Whitney, signing an agreement in December 1992 which provided for development testing and certification of the P&W 4000 series engines in ASTF.

This agreement supported development and certification of the Boeing 777 aircraft; and also led to other alliances and agreements with General Electric, Rolls-Royce and the United Kingdom’s Defense Research Agency. These alliance agreements continue to support both military and commercial testing.

Mr. Austin began his career at AEDC working for ARO Inc., the operating contractor from 1950-1980. He was assigned to the Propulsion Wind Tunnel (PWT) facility after having completed the engineering training program. In PWT he was assigned as a project engineer and was involved in test programs for the Polaris and Titan missiles, the F-111, XB-70 and F-15 aircraft.

Later he was assigned to the Lorho/Tripltee Facility group where he led the design and development of pilot tunnel facilities used for developing design criteria for large full-scale magneto-hydrodynamic hypersonic facilities.

Mr. Austin accepted an engineering position with the Air Force at AEDC in 1969 and continued his work for the center in that position.

In his work with the Air Force, Mr. Austin managed a broad range of ground test programs for the Aeronautical Systems Division, headquartered at Wright-Patterson AFB. These included the F-4E, F-15, B-1B, F-5E, A-10, F-16/17 Light Weight Fighters, Advanced Tactical Fighter (F-22) F119 Joint Fighter Engine program and the Air Launched Cruise Missile. As part of this work, he led AEDC teams in development of independent government ground test plans for these systems. He also represented AEDC in the Air Force Source Selection Evaluations for all of these systems.

In 1975, Mr. Austin was assigned to the AEDC Plans and Programs Directorate. In his role there he developed AEDC’s first Corporate Strategy Plan, formulated a new AEDC mission statement and conceptualized engineering analysis and technical evaluations (analysis & evaluations) as an added dimension of AEDC’s mission in support of Air Force weapons development.

In addition, he established a Flight Test/Ground Test Coordination Activity between AEDC and the Edwards AFB Flight Test Center. In 1980, he was assigned as the Deputy Director of the Engine Test

Facility (ETF). In this role, he was responsible for managing the propulsion test contract and protection of the engine test facilities.

He was also assigned as the U.S. Data Exchange Officer for air breathing and rocket engines with the British, French and German governments. He established a Data Exchange Agreement with the Canadian Government for turbine engines and rockets for which he was awarded a Canadian Medal upon his retirement.

Mr. Austin's major roles as director of the Propulsion Test activity was the creation of the commercial engine test alliances which continue today and the establishment of the critical need for the J-6 remote rocket test facility. He authored 20 AEDC technical reports and research papers. He was also responsible for critical review for all technical reports created in ETF.

Mr. Austin, a registered professional engineer, is a graduate of the University of Florida, National Defense University, National War College and George Washington University. He is a U.S. Navy veteran of the Korean War.

He serves the Salvation Army as a volunteer by sailing medical and school supplies to Cuba, Guatemala and Honduras. He also has a small business involved in inventing devices that are being produced in China where he has a Chinese partner.

Maintaining a very active life long after retirement is a choice Mr. Austin has made without any reservations.

"I'd rather burn out because I can't stand the thought of rusting out," he said.

When asked what he considered the most meaningful accomplishment of his career at AEDC, Mr. Austin did not hesitate with his answer.

"I think it is knowing that I had a direct involvement in developing the weapon systems that broke the back of communism so that our children and grandchildren do not have to live with that threat," he said.

Of all the prestigious awards, kudos, plaques, letters of appreciation and accolades, including those from England and Canada, Mr. Austin is particularly proud of the acknowledgement he got from the Air Engineering Metal Trades Union Council (AEMTC) leadership at the end of his AEDC career.

"When I announced I was going to retire, I got a letter from the AEMTC union thanking me for the leadership I brought to that operation," he said. "There is no accolade I am more proud of than that letter."

Mr. Austin knew from a very early age what the future held in store for him professionally, or as he often said, "what I would do for an avocation as opposed to a vocation."

However, the path to a successful career was neither straight nor a certainty.

After a four-year enlistment in the Navy was up, he disembarked from his ship, the USS Saipan, an aircraft carrier, in Mayport, Fla., after an around-the-world cruise. He hitchhiked, in uniform, down to Gainesville, getting to the University of Florida's campus around midnight.

When Mr. Austin went to apply for classes and told the admissions secretary he had no school transcripts, she told him he would not be accepted without the paperwork. He was determined to enroll in classes and ended up in front of Dr. Lester Hale's desk.

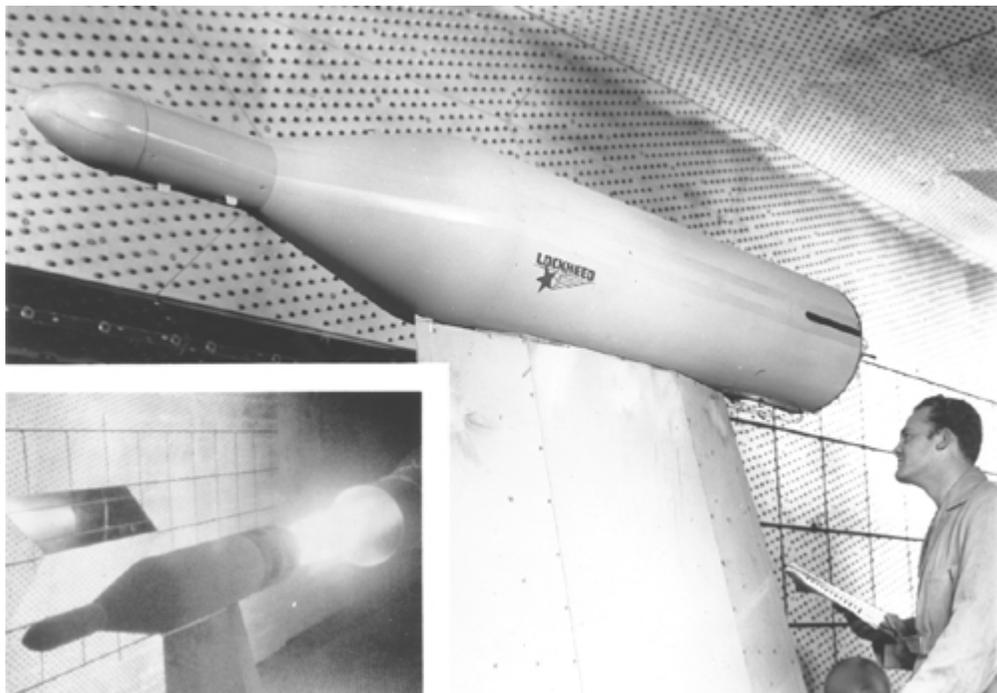
Dr. Hale, who was the dean of men at the school, sent Mr. Austin to the local VA for a battery of academic screening tests. To say he did not fare well on the tests was an understatement, but he repeatedly asked to be given a chance to attend the college.

The dean took the young man under his wing, helping to enroll Mr. Austin into remedial reading and math courses as well as a class on how to study. Once he began his engineering courses, Mr. Austin had found his niche, ultimately making the dean's list each semester.

When he graduated with a degree in aeronautical engineering from the university, Mr. Austin considered it a minor miracle.

On graduation day, upon hearing his mentor, Dr. Hale, describe the young man's early struggles and the subsequent applause of close to 4,000 in attendance, the Navy veteran of the Korean War broke into tears – grateful to put his hand around his diploma, proof of his hard-earned degree.

"Most of us know that nobody is ever any more than what somebody expects of them," he said. It was his mentors in the military, during college and ultimately at AEDC, whose expectations pushed him to go beyond his own expectations during his life and career.



Dick Austin inspects a scale model of a Polaris missile before a test conducted in the 16-foot supersonic wind tunnel. Theoretical and experimental studies at AEDC discovered a new base flow pattern and base heating source. Systematic testing of specific Polaris missile base configurations in conjunction with extended general studies succeeded in developing a missile base configuration which keeps the base heating under control. These findings were subsequently applied to the design of the Minuteman, Titan and Centaur systems.