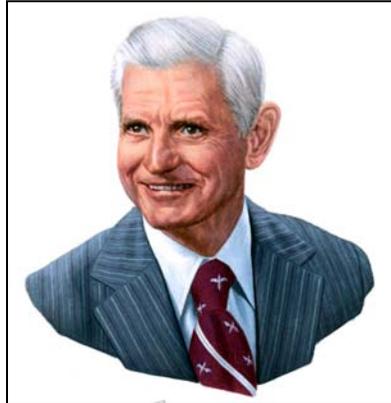


Dr. Benjamin Paul Blasingame
Inducted 2008



Dr. Benjamin Paul Blasingame was born in State College, Centre County, Pennsylvania, on 1 August 1919. He attended Pennsylvania State College, where he majored in mechanical engineering and joined the Reserve Officer Training Corps (ROTC) program. He graduated from Penn State in 1940 and was called to active duty in early 1941. After working on ground-based radar systems in Panama, he moved to the Armament Laboratory at Wright Field, Ohio.

Under Air Force sponsorship, Dr. Blasingame began his graduate studies in 1947 at Charles Stark Draper's Instrumentation Laboratory at the Massachusetts Institute of Technology (MIT) and received his Doctor of Science degree in 1950. Bernard A. Schriever, then a colonel on the Air Staff immediately recruited this newest member of Draper's "inertial mafia" to work in the recently formed Office of Development Planning. While there, he developed specifications for a new Strategic Air Command (SAC) bomber, with attention toward base hardening to ensure security and safety of the new aircraft and its crews.

In 1954, when Dr. John von Neumann's Strategic Missiles Evaluation Committee recommended acceleration of the intercontinental ballistic missile (ICBM) program, General Schriever was appointed to lead that effort as commander of the newly established Western Development Division (WDD). Authorized to handpick his initial cadre, General Schriever identified then Colonel Blasingame as one of his first four choices. Not long after reporting to WDD in July 1954, he scheduled a private meeting with General Schriever and convinced the latter that too little attention had been paid to the security and safety of the planned ICBM bases. From that time forward, everything was reexamined with an eye toward hardening the missile bases for purposes of survivability and safety.

As Chief Guidance and Control Project Officer, Colonel Blasingame soon became an in-house advocate for equipping ICBMs with inertial guidance, which put him at odds with many experts, who considered it too experimental and too heavy compared to radio

guidance. After talking "late into the night" with Stark Draper, however, Colonel Blasingame was more convinced than ever that AC Spark Plug Division of General Motors Corporation, backed by MIT, could produce a workable inertial guidance system for the ICBM. Consequently, he won approval for using inertial guidance as a backup for radio guidance on the Atlas ICBM and as the primary guidance system on the Thor intermediate range ballistic missile.

From 1956 to May 1958, Colonel Blasingame served as the first program manager for Weapon System (WS) 107A², the Titan ICBM. He recommended ways to accelerate Titan development and worked on plans for using storable, non-cryogenic propellants in a second-generation Titan.

Colonel Blasingame left AFBMD for an assignment at the newly constructed US Air Force Academy near Colorado Springs, Colorado, where he created the Department of Aeronautics and Astronautics. In a September 1958 interview with New York Times reporter Clayton Knowles, Colonel Blasingame explained that his objective as the first chair of the Astronautics Department was to "turn out future commanders of ballistic missile squadrons-not space cadets."

Colonel Blasingame resigned his commission in 1959 to become director of engineering, later manager, at AC Spark Plug, the Electronics Division (Delco) of General Motors Corporation in Milwaukee, Wisconsin. In April 1959, AC Spark Plug had received an Air Force contract to build the guidance system for Titan II, the first all-inertial Air Force ICBM. On the civilian side, Dr. Blasingame contributed extensively to development of the highly precise Carousel inertial navigation and guidance system for the Boeing 747. During the late 1960s, Carousel IV was the subject of the largest ever single military procurement of such equipment, when it was chosen by the USAF for the C-5A Galaxy and C-141 Starlifter transports and KC-135 tankers. Also widely used in missile and satellite launches, Carousel has been integrated with Global Positioning System capabilities for highly accurate, highly reliable guidance and navigation.

Under Dr. Blasingame's leadership, Delco became the prime contractor for building NASA's Apollo guidance and navigation system, plus the Lunar Roving Vehicle used on the last three lunar-landing missions. As a member of the Apollo Executive Committee voting in November 1968 on whether to proceed with the Apollo 8 circumlunar mission, Dr. Blasingame confidently stated, "G&N hardware is completely ready. Generalizing to the mission as a whole, when we risk the lives of people, we ought to get something for the risk. A lunar orbit flight looks like the right size of step to make."

Dr. Blasingame later moved westward to manage the Santa Barbara, California, operations of the Delco Electronics Division of General Motors. There, he worked to advance so-called "rotorcraft" or helicopter technology. Even after his retirement from Delco in 1979, he continued to serve on National Research Council committees and panels that advised NASA on its role in development of rotorcraft technology.

Over the years, Dr. Blasingame patented some of his innovative designs and shared many of his insights in publications. Dr. Blasingame's own textbook, simply titled *Astronautics*, appeared in 1964 as part of the McGraw-Hill Series in Missile and Space Technology.