



IRA GRANT HEDRICK

1913–2008

Elected in 1974

*“For contributions to aerospace technology,
particularly in the area of structures and materials.”*

BY RENSO L. CAPORALI

IRA GRANT HEDRICK, a guiding force in aerospace technology and former senior vice president and director of all technical operations at the Grumman Aerospace Corporation, died on January 14, 2008, at the age of 94.

Grant, as he was called by most of his peers and close acquaintances, was born in Kansas City, Missouri, on February 10, 1913. As a young man he spent one year at the University of Illinois and two years at the University of Washington. He graduated from the University of Arkansas with a bachelor's degree in civil engineering. A year of graduate work at Princeton University, with special emphasis in structural design/analysis, led to a graduate degree in 1937. From February 1942 to September 1943, Grant worked for Johnson, Drake and Piper, assigned as “contractor support” to the U.S. Army Corps of Engineers in North Africa on the design and construction of infrastructure in support of the Allied war effort in that theater of operations. He returned to the United States in September 1943 and went to work for Grumman Aircraft Engineering Corporation as a stress analyst the following month. He quickly became the project analyst for

the U.S. Navy's SA-16 Albatross amphibian aircraft intended for, among other uses, open-sea rescue operations. During this assignment he developed a method for predicting hull loads that would be experienced during water landings and takeoffs that became an industry standard. This was but the beginning of a rapid rise up the technical ladder.

Grant was made chief of structures in 1946, chief technical engineer in 1957, vice president of engineering in 1963, and senior vice president and director of all Grumman technical operations in 1970—a position he held until his retirement in 1980. During that time he was directly involved both as a personal contributor and a technical overseer with every Grumman aircraft program from the Korean War-era F9F Panther through the recently retired F-14 Tomcat, as well as the Apollo Lunar Module, which successfully landed men on the Moon. During this time, Grant made contributions in the area of structural design and analysis for which he was widely recognized. His development of a simple but effective method for fatigue life prediction enabled the industry to design and guarantee the operational life of an aircraft. With proper instrumentation, this led to the ability to track the remaining life of an individual aircraft.

In the twilight of his career, Grant led Grumman's participation in the Princeton Tokamak Reactor, a federal program to study the feasibility of using fusion reactors to generate electricity. Subsequent to his retirement, Grant served as a senior Grumman management consultant until 1994.

A registered New York state professional engineer, Grant was affiliated with several professional societies. In 1974 he was elected to the National Academy of Engineering in recognition of his many contributions to aerospace technology. In 1976 he was appointed to the U.S. Air Force Scientific Advisory Board and served until 1984. He served on many advisory committees for the government, industry, and universities. Grant received the American Society of Mechanical Engineers Spirit of St. Louis Award in 1967, the American Institute of Aeronautics and Astronautics (AIAA) Sylvanus Albert Reed Award in 1971, the National Aeronautics and Space Administration's

Distinguished Public Service Medal (the agency's highest decoration) in 1984, and the Department of the Air Force's Exceptional Civilian Service Award in 1984. In 1989 he was elected an honorary fellow of the AIAA and in 2008 was elected to the Long Island Technology Hall of Fame.

Beyond his interest in technology, Grant was interested in the development of engineers of the future and in their growth on the job. He gave lectures at universities and served on several advisory boards. At Grumman he was a colleague and teacher to generations of engineers who looked up to "the technical conscience of Grumman." Some he mentored at close range. I went to work for him directly as a technical assistant from 1966 to 1968. In those two years and despite some eight years of university training, a Ph.D. in aeronautical engineering, and four years of military service as a naval aviator, it is hard to imagine a postdoctoral appointment that could have provided a better learning experience. Beyond the technical knowledge that he imparted, his demand for thoroughness and integrity taught like no textbook ever could. Without those two years of mentoring, I have no doubt that my own life's journey would have been very different.

And Grant had a life outside of Grumman. In the 1960s he decided to try the operator side of aerospace, learned to fly, and bought an aircraft that he continued to operate until advancing years and prudence suggested it was time to quit. He was also an extremely interested and accomplished tennis player—probably the equivalent of a golfer with a low single-digit handicap. At one time he and his son got to the finals of the father/son national tennis tournament on the grass at Forest Hills.

His wife Tina wrote:

"I knew Grant Hedrick for more than twenty years as my husband's boss. When I married him in 1993, he was 80 years old and we had fifteen wonderful years together. I had been a widow for nine years and Grumman and Northrop were discussing the merger. Grant had been planning to move to California to be closer to his family, but instead he chose to stay on Long Island, where

Grumman was located, and married me.

He designed and built a guest wing and his children and grandchildren and my sons visited often. We played golf and traveled to California often and to Germany in 1997. We were both active in the development of the "Cradle of Aviation," a museum in Garden City, New York, which now houses many of the Grumman airplanes and the Lunar Module."

Grant was married to his first wife Shirley for more than 50 years. They had three children, sons Grant II (known as Bing) and Karl and a daughter Cindy.

Grant was predeceased by his first wife, Shirley, and a son. He is survived by his second wife, Tina, another son, a daughter, four grandchildren, and two great-grandchildren.

