



Lawrence M. Woolf.

LAWRENCE M. MEAD JR.

1918–2012

Elected in 1988

*“For outstanding technical accomplishment and leadership
in the design and development of naval aircraft.”*

BY MICHAEL V. CIMINERA
SUBMITTED BY THE NAE HOME SECRETARY

LAWRENCE MYERS MEAD JR., the longest-serving Grumman officer, with over 50 years of outstanding accomplishments for the company, the aerospace industry, and the nation, died August 23, 2012, at the age of 94.

Larry was born in Plainfield, New Jersey, on May 11, 1918, grew up in Beijing (then called Peking), China, and attended the Hill School in Pottstown, Pennsylvania. He graduated from Princeton University in 1940 with a BS in engineering with highest honors and keys to the honorary scholastic and scientific fraternities Phi Beta Kappa and Sigma Xi, and in 1941 earned a degree in civil engineering.

Larry was gifted with an innate ability to visualize the flow of forces and stresses in structures that enabled him to perform redundant structural analyses in his graduate year, and this talent was recognized by the chief of structures at the Grumman Aircraft Engineering Corporation. He joined the company’s engineering department in June 1941, when Grumman had been in existence for only 11 years. His first assignment involved developing a pioneering shear-lag analysis that could predict structural failures in a carrier-based aircraft folding wing. Successive lead stress analysis efforts on the F6F Hellcat wing fold and center section and the F7F

Tigercat wing led to his responsibility for the stress analysis of the entire F8F Bearcat airframe.

After World War II he became the structural project engineer for the XF9F-1 Panther, responsible for the structural integrity of the aircraft. The US Navy awarded Grumman a contract for the variable sweep wing XF10F-1 Jaguar in 1948 and Larry was involved with the preliminary design of the aircraft; he was appointed assistant project engineer to manage the design team, but the aircraft was cancelled because of technical problems. He was then assigned as assistant project engineer for the XF11F-1 Tiger fighter aircraft, which flew in 1954—just 16 months after contract award!

Grumman engineering management carefully groomed Larry for his next assignment on the A2F-1 (A6A) Intruder. As project engineer he was in charge of the preliminary design team as well as the proposal to the US Navy. After award he was responsible for the total weapon system development, including the aircraft, logistics, and electronics. He guided the A2F-1 program for seven years through development, flight test, initial production, and carrier trials. In November 1963 he became head of the engineering staff and in 1964 assumed additional duties as head of preliminary design.

Before the demise of the F-111B in 1968, the Navy engaged in new aircraft studies in the mid-1960s for the VFAX, an advanced fighter concept. He managed these studies as well as those for the Air Force FX program.

It was at this time that I met Larry. I was a young preliminary design engineer conducting VFAX parametric aircraft design studies and he asked many penetrating questions based on his vast experience. He was always fair and considerate with the “youngsters.”

He then headed the Titanium Committee at Grumman that involved many departments. The large use of titanium was a key Grumman development that led to the successful award of the F-14 program in 1968. He led the proposal effort and became director of manufacturing and manufacturing engineering for the F-14.

In 1969 he was appointed a vice president and his vast experience, talent, and management skills were put to the test again when he was tapped to lead Grumman's space shuttle proposal to NASA. This was an enormous undertaking that required not only designing the space shuttle system but also developing strong team relationships. Grumman battled down to the wire with Rockwell, which was selected for the contract in 1972.

Grumman greatly benefitted from Larry's promotions to vice president of technical operations in 1973 and then senior vice president and director of departmental operations in 1975. In these capacities he pushed hard to refresh the company's engineering staff by hiring the best and brightest and by streamlining key processes such as cost estimating and design-to-cost. He also was instrumental in establishing a Plasma Physics Laboratory at Princeton and providing the leadership for Grumman to be one of the first companies to adopt computer-augmented design and manufacturing (CADAM).

In 1976–1977 Larry put on another hat as vice president and program manager of Grumman's effort to design the Gulfstream III executive jet. This was a most successful program and the G III flew in 1979. As part of the company's expanding international programs Larry also made several trips to China and promoted much good will. The last major project in his impressive career was to oversee the design, construction, and sea trials of the Israeli hydrofoil program launched in 1981.

He retired in 1983 but served as a Grumman management consultant for another ten years. He was also active as chair of the AIAA Awards Committee and a member of the management committee of the Aviation Industries Association, the Long Island Technology Forum, the board of trustees of the New York Hall of Science, and the advisory committee of Princeton's Aerospace and Mechanical Engineering Department.

I had the distinct pleasure of conversing and exchanging notes with Larry over the last three years as part of my

research on a book about the aircraft designers of Grumman. I also vividly remember his last visit to the Grumman Vice President Reunion in 2011 on Long Island, to which he drove from Connecticut by himself. He regaled us with his memories of Grumman in 1941 when he was hired, and we will cherish his wit, clarity, and recall.

It is fitting to end this tribute with a quote from Larry's autobiography:

Whatever the outcome, there is no doubt that the 52 years that I spent with Grumman were the best ones of its 65 years of existence. There was always something new to learn, some new technical or management challenge. It was a great place to work because of the Grumman family spirit which pervaded the environment.

Larry is survived by sons Lawrence, Kirtland, and Bradford; sisters Elizabeth Bolton and Margaret McCutchen; nine grandchildren; and six great-grandchildren. His wife of 59 years, the former Janet Chase, died in 2001.

