Edward C. Wells

1910–1986

By Edward H. Heinemann

Edward C. Wells was one of the last of the "old time engineers." He was truly a chief engineer who understood all the parts of an airplane and usually conceived and directed the design of the entire airplane himself.

Because we were approximately the same age and had similar responsibilities at two competing companies, the Boeing Company and Douglas Aircraft, I came to know Ed and his accomplishments very well and to respect his work greatly. He was an excellent engineer, and under his direction, many of the world's finest airplanes were born. Among them were the Boeing B-17, B-29, B-47, and B-52, as well as the commercial models 707, 727, 737, 747, 757, and 767.

Mr. Wells began his career with Boeing in 1931. He retired as a senior vice-president in 1972, but continued as a company consultant and member of the board of directors until 1978, when he resigned from the board.

As assistant project engineer on the 299 (the forerunner of the B-17), Mr. Wells was responsible for the wing flap system, the largest ever considered until that time. Sophisticated flap systems have been a trademark of Boeing airplanes for forty-five years, beginning with the 299 in 1934.

Mr. Wells received fifteen patents for inventions, most of them for innovations in mechanical and flight systems. For example, he led the engineering efforts that made the B-29
the outstanding bomber of its day. The B-29's basic engineering advances included pressurized body (first introduced on Boeing's 307 Stratoliner in 1938), centralized fire control, power turrets, and dramatic increases in bomb load capacity and effective range.

Wells was made chief of Boeing's Preliminary Design Unit in 1936 and chief project engineer in charge of military projects in 1938. In 1939 he became assistant chief engineer, and in 1943 he was named chief engineer. He became vice-president and chief engineer in 1948.

In 1961 Mr. Wells was named vice-president and general manager of the Military Aircraft Systems Division. This division and the Transport Division were merged to become the Airplane Division in 1963. He became vice-president for product development in 1966.

Ed Wells was widely recognized and honored for his work in aviation. In 1942 he received the Lawrence Sperry Award from the Institute of the Aeronautical Sciences for "outstanding contributions to the art of airplane design." He was named "Young Man of the Year" by the Seattle Junior Chamber of Commerce in 1943, and in 1944 he received the Fawcett Aviation Award for "the greatest single contribution for the scientific advancement of aviation" during the year.

During World War II, Mr. Wells was a consultant to the secretary of war. Later, he was a member of the Research and Technology Advisory Council for the National Aeronautics and Space Administration, a member of the President's Special Task Force on Transportation, and a member of the Defense Science Board. In 1978, because of his significant contributions to aeronautics, Mr. Wells was elected an Elder Statesman of Aviation by the National Aeronautics Association.

Born in 1910 in Boise, Idaho, Mr. Wells graduated with "great distinction" and Phi Beta Kappa honors from Stanford University's Engineering School in 1931. He received an honorary doctor of laws degree from the University of Portland in 1946 and an honorary doctor of science degree from
Willamette University in 1953. He was a life member of the Willamette University board of trustees.

During the 1969–1970 academic year, Mr. Wells took a partial leave from Boeing to serve as a visiting professor in the Department of Aeronautics and Astronautics at Stanford University. He served on advisory boards for Stanford, the University of Washington, and the University of California at Los Angeles.

Mr. Wells was elected to membership in the National Academy of Engineering in 1967. He was also a member of the Society of Automotive Engineers, the American Association for the Advancement of Science, the American Society for Engineering Education, and the American Astronautical Society; he was an honorary fellow of the American Institute of Aeronautics and Astronautics (AIAA). He was president of AIAAs' predecessor organization, the Institute of the Aeronautical Sciences, in 1958.

He received the Daniel Guggenheim Medal in 1980 for his "outstanding contributions in the design and production of some of the world's most famous commercial and military aircraft." In 1981 he was elected a fellow of the Society of Automotive Engineers "for exceptional contributions to the advancement of automotive technology." In 1985 he received the Tony Janus Award in recognition of his "outstanding contributions to the development of complex aerospace systems and significant accomplishments in the design and production of a long line of the world's most famous military and commercial aircraft."

Mr. Wells died on July 1, 1986, and is survived by his wife Dorothy; a daughter, Mrs. William (Laurie) Tull of Etna, California; a son, Edward E. Wells of Aurora, Colorado; two grandsons, John and Eric Benjamin; and two sisters, Mrs. William Geer of Bellevue, Washington, and Mrs. William Ketteringham of Sun City, California.