MEDALIST FOR 2003

*For pioneering contributions to research, education and engineering in aeroelasticity, unsteady aerodynamics and aircraft design.*

# HOLT ASHLEY

Professor Holt Ashley dedicated his lifelong efforts to the advancement of aerospace sciences and engineering, in which his career was distinguished by his leadership in multidisciplinary aerospace technology. His methods changed the design of structures from wings to wind turbines.

While he is best known for his pioneering research and books in the field of aeroelasticity—the combination of aerodynamics and structures—he wrote classic textbooks in aerodynamics and aircraft engineering as well.

Professor Ashley was born in 1923 in San Francisco and grew up there. When World War II broke out, he left the California Institute of Technology, where he was a sophomore, to join the U.S. Army Air Corps. Too tall to be a pilot, Ashley was 6-foot-8, he served in the North Atlantic and Europe as a weather forecaster and reconnaissance officer, earning six military medals and publishing his first paper, "Icing in North West Europe."

He continued his education at the Massachusetts Institute of Technology (MIT), earning a master's degree in 1948 and his doctorate in 1951, both in aeronautical engineering. Professor Ashley then joined the MIT faculty, becoming a full professor in 1960. During this time he established his worldwide reputation as a teacher and pioneering researcher in aeroelasticity. His first book, Aeroelasticity, was written with Raymond Bisplinghoff and Robert Halfman, and quickly became a classic.

In 1964, Professor Ashley helped to establish the Department of Aeronautical Engineering at the Indian Institute of Technology in Kanpur, serving as the department's first head. He enjoyed nurturing deep and sincere friendships with scientists in other countries. Professor Ashley returned to California in 1967 to join the Stanford faculty as a professor in the Department of Aeronautics and Astronautics and began a reputation among students as a patient mentor whose door was always open and whose meticulous lectures were models of clarity.

Soon thereafter Professor Ashley found the time to realize his dream of becoming a pilot. He became emeritus in 1989 taking early retirement to enable the department to hire new young faculty, but then proceeded to carry a full load of teaching and research for years without pay. He was the only member of the faculty to be a specialist in every discipline of the PhD qualifying examinations.

Professor Ashley was an eloquent and inspiring author and lecturer who became as much a friend and father figure as a mentor to many of his students. Although he was best known for his work in aeroelasticity, his contributions were truly multidisciplinary, through more than 100 journal articles, five books, and service on numerous industry and government advisory boards and committees.

Ashley served on committees and advisory boards of NACA (the National Advisory Committee for Aeronautics), NASA, the Air Force, the Navy and the National Research Council as well as of the aerospace industry. From his work on the NACA subcommittee on vibration and flutter to a review of space-shuttle tile safety, Ashley applied fundamental approaches to a wide array of practical engineering problems.

His life-long work was recognized with many worldwide honors including the 1989 DGLR German Aerospace Society Ludwig Prandtl Ring Award, the 1992 ASME Spirit of St. Louis Medal, the 2006 AIAA Reed Aeronautics Award, and the U.S. Air Force Exceptional Civilian Service Award (twice). A Past President of AIAA, he was an Honorary Fellow of the AIAA and the Royal Aeronautical Society, and a member of the National Academy of Engineering and International Academy of Astronautics, among others.

Professor Ashley passed away on May 9, 2006 about a week before the spring meeting of the Aerospace Flutter and Dynamics Council, where he was always an invited guest and had attended many meetings.

A giant in aeronautics and aeroelasticity as well as in stature, Professor Ashley shall be forever remembered by his colleagues at Stanford and other universities, research organizations, and industry.