



*Jimmy Ashkenas*

# IRVING L. ASHKENAS

1916–2011

Elected in 1992

*“For leadership in flying qualities theory and practice, and for contributions to flight control systems and aerospace vehicle system design.”*

BY TOM MYERS AND WADE ALLEN  
SUBMITTED BY THE NAE HOME SECRETARY

IRVING L. ASHKENAS, distinguished aerospace engineer and cofounder of Systems Technology, Inc., passed away peacefully at his home in Los Angeles, California, on April 10, 2011. He was 94 years old. Ashkenas was born in New York City on September 3, 1916, the son of Max and Rose Ashkenas.

Irving Ashkenas attended the California Institute of Technology, where he earned his bachelor of science degree and two master’s degrees and graduated with honors in 1939. His professional career began at North American Aviation, where he played a key role in the development of the P-51, one of the most famous aircraft of World War II. The original design was prone to overheating, and Ashkenas developed an air inlet design that overcame this problem. During his 14 years with Northrop Aircraft, he worked on the aerodynamics and control system design of such pioneering aircraft as the Northrop flying wings and the P-61 and F-89 fighters.

In 1957, Ashkenas cofounded Systems Technology, Inc., an internationally acclaimed company specializing in systems analysis of air, sea, and ground vehicles and human operator dynamics. Ashkenas had responsibility for and made significant and innovative contributions to over 30 aircraft and missiles. During his long and distinguished career he served on a number of investigative and governmental oversight committees, generated some 70 technical papers, wrote five

books, and was awarded eight patents for various aircraft control systems and for a device for measuring the psychomotor capabilities of pilots and astronauts. Ashkenas coauthored the widely acclaimed *Aircraft Dynamics and Automatic Control* (Princeton University Press, 1973) along with his colleagues Duane McRuer and Dunstan Graham.

Ashkenas was a fellow of the American Institute of Aeronautics and Astronautics (AIAA) and a recipient of the institute's Mechanics and Control of Flight Award for 1970. He was cited in 1984 for his AIAA paper titled "25 Years of Handling Qualities Research." He directed and assembled a 1988 international lecture series sponsored by the Advisory Group for Aerospace Research and Development, the aeronautical research and development arm of the North American Treaty Organization. Ashkenas was AIAA's Distinguished Lecturer for 1990–1992 and in 1992 he was elected to membership in the National Academy of Engineering. He served as an independent consultant to Northrop Aircraft's stealth bomber project from 1982 to 1987, reflecting expertise derived from his early work on Northrop's XB-35 and YB-49 flying wing aircraft. In 1989 he reported on a National Aeronautics and Space Administration–sponsored study of performance improvements attainable through longitudinal automatic stabilization in tailless flying wing aircraft. After his retirement at age 77, Ashkenas remained an active member of the board of Systems Technology, Inc., and in 2007 was elected chairman.

Irving Ashkenas was a man of many interests and abilities. An avid sports enthusiast, he played handball, squash, badminton, tennis, and golf and also enjoyed horseback riding, swimming, surfing, snorkeling, and skiing. He was an active member of the PLATO Society of University of California, Los Angeles and took weekly singing classes through Santa Monica City College's emeritus program. Ashkenas and his wife, Shirley, loved to travel, and they enjoyed the cultural life of Los Angeles by attending concerts, operas, and dance and theater programs. They supported many Los Angeles–area charities and were longtime members of Temple Beth Am.

Irving Ashkenas is survived by his devoted and loving wife Shirley, son Adam, daughter Sharon Fabian, grandchildren Sara and Erin Fabian, and numerous nieces and nephews. Services were held on April 13, 2011, at Eden Memorial Park in Mission Hills, California.