MEDALIST FOR 1969

For personal contributions to outstanding research and development leading to vastly improved re-entry bodies, missiles, satellites and spacecraft, and for leadership in directing and inspiring a large group of men at Ames Laboratory.

H. JULIAN ALLEN

A selfless, dedicated scientist whose personal reward was the safety of America's astronauts—that was H. Julian Allen.

It was Allen who, in 1952, conceived the concept of bluntness as an aerodynamic technique for solving the severe re-entry heating problem then delaying the development of ballistic missiles. His experiments revolutionized the fundamental design of ballistic missile re-entry shapes and were later applied to spacecraft.

At the time he originated his research, Allen was a top engineer on the staff of the National Aeronautics and Space Administration's Ames Research Center at Moffett Field, California. He had gone to Ames from the Langley Research Center, where his work with NASA had begun in 1936, and became chief of the High-Speed Research Division in 1945.

Allen, a graduate of Stanford University, received in 1957 the Distinguished Service Award, the highest honor of NASA's predecessor agency, the National Advisory Committee for Aeronautics, but his re-entry work was but one of his accomplishments. He developed a well-accepted theory for predicting forces at supersonic speeds on bodies at angles of attack, guided the experimental investigation of heat transfer and boundary layer development at supersonic speeds, and did important research into shock-wave boundary-layer interaction—all areas leading to vital progress in supersonic and hypersonic aerodynamics.

In 1965, NASA awarded him its coveted Medal for Exceptional Scientific Achievement for his leadership in solving problems in the design of supersonic aircraft, missiles and spacecraft, mostly in the field of thermal protection.

Allen died January 29, 1977.