MEDALIST FOR 1966

For contributions to aeronautical education and significant developments in new fields of aircraft instrumentation, in particular for pioneering inertial guidance techniques making possible en route navigation independently of earth references; for over twenty-five years of leadership in the technology of control and guidance of flight vehicles, and with the training of a large number of engineers in this vital field of aeronautics and astronautics.

CHARLES STARK DRAPER

As a renowned teacher, Charles Draper has always emphasized that an engineer’s responsibility is to make things that work reliably—literally, putting practicality on an equal plane with theory.

As a renowned scientist, Dr. Draper followed his own advice—from his vast background in aeronautical instruments, flight testing and vibration measurements sprang the practical application of high performance inertial instruments to air and sea fire control systems, and to inertial navigation of manned aircraft, missiles and space vehicles.

A Missourian by birth, Draper majored in psychology at Stanford but after getting a B.A. in this field he took graduate work at Massachusetts Institute of Technology where he earned three scientific degrees—a B.S. in electrochemical engineering, an S.M. with no specification, and an Sc.D. in physics. He became head of MIT’s Department of Aeronautics and director of the school’s Instrumentation Laboratory, organizing courses in the fields of instrument engineering and fire control. The Instrumentation Laboratory later spun off as The Charles Stark Draper Laboratory, Inc.

Worldwide recognition came his way for his pioneering research and development of inertial navigation, but the hundreds of students he taught at MIT remember him equally for his classroom techniques. An effective teacher, Draper balanced his mastery of theory with insistence on practical application. “Engaging and inquisitive” was the way one student described the personality of this brilliant yet humble man.

A pioneering figure in the aircraft engineering field, he also contributed to the Apollo space program with his knowledge of guidance systems.
Draper’s many honors include the Medal of Merit, the Naval Ordinance Development Award and the U.S. Air Force Exceptional Service Award. In 1955, he was the Wilbur Wright Memorial Lecturer of the Royal Aeronautical Society.