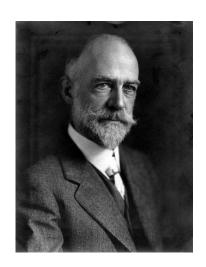
## **MEDALIST FOR 1935**

For notable achievement as pioneer in laboratory research and theory of aeronautics; distinguished contributions to the theory and development of aircraft propellers.



## WILLIAM FREDERICK DURAND

As teacher, researcher, theorist, administrator and innovator, William Frederick Durand devoted a long and active life to the development and improvement of aircraft, to aeronautical theory, and to the training of men who were destined to carry on his work and apply it to practice.

Born at Beacon Falls, Connecticut, on March 5, 1859, he was educated at Derby, Connecticut, and at the United States Naval Academy, where he was graduated with honors in 1880.

Remaining in the Naval Service until 1887, he resigned to take up teaching as a life profession. Appointed first as Professor of Mechanical Engineering at Michigan State College, he transferred to Cornell University in 1891, there taking charge of the newly-organized graduate school of Marine Engineering and Naval Architecture. In 1904 he took the chair of Mechanical Engineering at Stanford University, remaining until 1924 when, by age limit, he was retired as Professor Emeritus. Retirement, however, did not end Durand's useful career; he continued to be occupied with numerous important engineering and scientific undertakings.

Problems in fluid mechanics early attracted his attention. His first published technical article, written while he was attached to the U.S.S. Tennessee, was concerned with ship propulsion. This was followed in later years by extended experimental research and a long series of papers dealing with the general problem of the screw propeller, both for ship propulsion and aircraft.

When, in 1914, a move was made toward the establishment of a National Advisory Committee for Aeronautics, Durand was invited to Washington to join the undertaking. The Committee was officially formed the following year, and he was appointed a member by President Wilson. He was elected Chairman of the Committee in 1916. Under his direction a service of examination and advice regarding aeronautic patents was organized in the NACA.

## Daniel Guggenheim Medal

Another undertaking was the development of plans for the NACA's laboratory at Langley Field and the preparation of designs for the first NACA windtunnel.

Following his retirement from Stanford, he served for a year as President of the American Society of Mechanical Engineers. In 1925 he was invited to become a trustee of the Daniel Guggenheim Fund for the Promotion of Aeronautics, and continued in this capacity during the active life of the Fund, from 1925 until 1930. Among the Fund-sponsored projects he undertook was the preparation, as general editor, of an encyclopedia of fundamental aerodynamic theory written as a series of monographs by recognized authorities. The monographs, twenty in number, were published in six volumes, totaling 2,000 pages of text.

Honored the world over for his technical contributions, Durand died in Brooklyn, New York, August 10, 1958, at the age of 99.