

and airscrews. It is in itself an up-to-date treatise on aero engine design and practice as the following chapter headings show:—Design data; performance data; design and stress calculations; supercharging; carburettors and intake systems; cooling; ignition; fuels and fuel systems; lubricating oils and oil systems; exhaust systems and silencing; engine heaters and starting; testing of engines; compression ignition engines; and airscrews.

### Obituary

The Council greatly regret to record the deaths of the following members of the Society:—

#### HERMANN GLAUERT, F.R.S., *Fellow.*

Mr. Glauert was struck and fatally injured by a flying fragment of wood while watching engineers blowing up the stump of a tree on Fleet Common, Hampshire, on August 4th, 1934.

Hermann Glauert was born in Sheffield on October 4th, 1892, and was the son of Mr. Louis Glauert. He was educated at King Edward VII School, Sheffield, and Trinity College, Cambridge, where he took a first class in the Mathematical Tripos, Part I, in 1911, and Part II in 1913. In the latter year he was awarded the Tyson medal for astronomy and related subjects. In the following year he was awarded the Isaac Newton Studentship in astronomy and physical optics and the Rayleigh prize for mathematics in 1915. He joined the staff of the Royal Aircraft Establishment in 1916, where he was engaged on aerodynamical research until his death, and in 1920 was elected a Fellow of Trinity and recently a Fellow of the Royal Society. He was elected a Fellow of the Royal Aeronautical Society in 1926.

Hermann Glauert made many important contributions to the science of aerodynamics. He was the author of numerous Reports and Memoranda of the Aeronautical Research Committee dealing with aerofoil and airscrew theory, performance, stability and control of aeroplanes, and the theory of the autogiro. His work, "The Elements of Aerofoil and Airscrew Theory," published in 1926, is a standard work on the subject. He contributed numerous papers in the Proceedings of the Royal Society and lectured before the Royal Aeronautical Society.

In 1922 he married Muriel Barker, B.Sc., and leaves two sons and a daughter, to whom the President and Council extend their deepest sympathy in her tragically swift bereavement.

The following appreciation of Mr. Glauert and his work from Mr. H. E. Wimperis, Director of Scientific Research, appeared in *The Times*:—

"The sudden death of Mr. Glauert is a serious loss to aeronautical science. As a Fellow of the Royal Society and a fellow of Trinity College, Cambridge, he was one of the chief of the research workers of the Air Ministry. His mathematical work in the field of aeronautics had won for him an international reputation, and he was this year appointed as head of the Aerodynamics Department of the Royal Aircraft Establishment at Farnborough. He was prominent, not only as the leader of a team of scientific workers, but as having made personal contributions of the highest value. Such men are rare and almost irreplaceable. His sudden death is a serious blow to his scientific friends and collaborators."

#### FLIGHT LIEUT. R. E. H. ALLEN, *Associate Member.*

Flight Lieut. R. E. H. Allen was accidentally killed by being run over. An Associate Member from 1923, he was an authority on ground transport in the Royal Air Force, on which he read a paper before the Society. He joined the staff at Scotland Yard and helped the police experiments for motor control from the air. He was indefatigable in his work on behalf of the Society in many ways, particularly in delivering many school lectures. His death was a very great blow to a large circle of friends.