

NEWS and VIEWS

Aviation at the Imperial College of Science and Technology : Prof. H. B. Squire

MR. H. B. SQUIRE has been appointed to the Zaharoff chair of aviation at the Imperial College of Science and Technology, London, in succession to Prof. A. A. Hall, who has recently been appointed director of the Royal Aircraft Establishment, Farnborough (see *Nature*, July 7, 1951, p. 19). Mr. Squire read mathematics at Balliol College, Oxford, where he was an Exhibitioner, and afterwards he carried out research in fluid mechanics for two years under Prof. R. V. Southwell, followed by a year at Göttingen, where he worked under Prof. L. Prandtl on problems of laminar flow stability. In 1934 Mr. Squire joined the staff of the Aerodynamics Department of the Royal Aircraft Establishment, where he remained until 1938, when he was appointed lecturer in the Department of Mathematics, University of Manchester. He returned to the Royal Aircraft Establishment, however, just prior to the outbreak of the War, and remained there until 1949, when as senior principal scientific officer he transferred to the Aerodynamics Division of the National Physical Laboratory. Mr. Squire has made a number of notable contributions to various branches of aerodynamics, and he is an acknowledged authority on fluid dynamics, heat transfer and helicopters. His work has always been informed by an unusually keen physical insight and appreciation of fundamentals. He is perhaps best known for his researches on the stability of fluid flow to three-dimensional disturbances, the profile drag of aerofoils, heat transfer at the surface of a wing, the stability of helicopters, low-drag wings, wings suitable for supersonic flight, and the flow in jets. In addition, he has been responsible for a number of important experimental investigations both in the air and in wind tunnels. His publications include several Reports and Memoranda of the Aeronautical Research Council and the chapters on heat transfer in "Modern Developments in Fluid Dynamics", published under the editorship of Prof. S. Goldstein by the Oxford University Press in 1938.

Institution of Mechanical Engineers: Awards

THE Institution of Mechanical Engineers has awarded the James Clayton Prize for 1951 to Dr. H. Roxbee Cox, for his contributions to engineering science and practice, particularly in the fields of aeronautics, power generation and fuel utilization, communicated in part in a Thomas Hawksley Lecture to the Institution in November last; it amounts to £1,550. Dr. Roxbee Cox, who is a past-president of the Royal Aeronautical Society, was for many years engaged in aeronautical scientific and engineering research and engineering work, and since 1948 he has been chief scientist of the Ministry of Fuel and Power. The first James Clayton Prize was awarded for 1945 to Air Commodore (now Sir Frank) Whittle, for his work in the development of jet propulsion; Dr. Roxbee Cox worked in association with Sir Frank during the War. The Prize is derived from a fund established by the late Mr. James Clayton, who was a member of the Institution and chief engineer of Courtaulds, Ltd. It is awarded to a member, associate member, graduate or student who, in the opinion of the Council of the Institution, has contributed most in the year to modern mechanical engineering science by way of research, invention, or experimental work,

or by a treatise or paper on a modern mechanical engineering subject, or by originality in design, or by service to mechanical engineering.

The Thomas Hawksley Gold Medal of the Institution, accompanied by a premium of £25, has been presented to Mr. J. L. Norton, for his paper on "The Design and Development of the Twin Centaurus Power Plant for the Bristol 'Brabazon'", this being the best paper read at a general meeting or printed in the *Proceedings* of the Institution during 1951.

Dr. J. C. Davisson: a Tribute by the Bell Telephone Laboratories

THE October issue of the *Bell System Technical Journal* (30, No. 4; 1951) consists of two parts, the first one of which is a special issue in celebration of Dr. J. C. Davisson's seventieth birthday and contains contributions from his friends and former associates at the Bell Telephone Laboratories. Dr. Davisson, who was born on October 22, 1881, was a research physicist at the Bell Telephone Laboratories from 1917 until his retirement, in 1946, at the age of sixty-five, when he became research professor in the Department of Physics, University of Virginia. Thermionics, electron diffraction and electron optics, and crystal physics have been the main fields of investigation in which Dr. Davisson has made important contributions. He is most widely known for his experiments, together with Dr. L. H. Germer, in 1927, on nickel, in which he demonstrated for the first time the existence of electron waves. Simultaneously, though by a rather different technique, Prof. G. P. (now Sir George) Thomson made the same discovery, and in 1937 Davisson and Thomson shared the Nobel Prize for their important contribution to physics. A portrait, by H. E. Ives, of Dr. Davisson is reproduced as the frontispiece to the special issue, and appreciations of Dr. Davisson as a man and colleague, and of his scientific work, are contributed by Dr. M. J. Kelly, president of the Bell Telephone Laboratories, and by Dr. K. K. Darrow, respectively. The remainder of the issue contains articles describing various experimental and theoretical researches, and these contributions are by members of the staff of the Bell Telephone Laboratories whose work and careers have benefited through close association with Dr. Davisson. A detailed bibliography of Dr. Davisson's published papers concludes the issue.

United Nations Universal Declaration of Human Rights

THE influence of the Universal Declaration of Human Rights, during the three years since it was adopted by the General Assembly of the United Nations on December 10, 1948, is appraised in a recent pamphlet entitled "The Impact of the Universal Declaration of Rights", which has been issued by the United Nations Department of Social Affairs (pp. 42; London: H.M.S.O., 1951; 1s. 9d., 25 cents). After setting forth the authority on which the Declaration is based, the pamphlet examines the general reception of the Declaration in the world, both by groups and by individuals, and describes the work of the United Nations Educational, Scientific and Cultural Organization in giving publicity to the Declaration. It then examines the effect of the Declaration in the work of the United Nations and of the Specialized Agencies, as well as its influence on international treaties and agreements and national constitutions and legislation. The Declaration has