

dimensions. Dr. Mahler joined the staff of the University of Manchester as an assistant lecturer in 1937, and except for one short intermission has remained there ever since. He was elected to the Royal Society in 1948.

#### Royal Aeronautical Society :

##### New President

Mr. G. H. Dowty has been elected president of the Royal Aeronautical Society for the year 1952-53. Mr. Dowty, who is a vice-president of the Society, has been associated with the aircraft and aircraft-component industry throughout his career. Since 1922 he has worked on the development of undercarriages and was the inventor of one of the early deck-landing arresters developed in Great Britain. In 1931 he founded his first company with one man, and is now chairman and managing director of Dowty Equipment, Ltd., and other associated companies in Great Britain and overseas, employing many thousands of people.

##### Awards

THE following medals and prizes have been awarded by the Royal Aeronautical Society: *Society's Gold Medal*, Prof. T. von Kármán, for his outstanding work in aerodynamic theory; *Society's Silver Medal*, Dr. H. Sutton, for his outstanding work over many years on metallurgy in aircraft design; *Society's Bronze Medal*, H. Povey, for his work on the production of the *Comet* aeroplane; *British Gold Medal*, G. R. Edwards, for his outstanding work in aircraft design; *British Silver Medal*, Dr. D. M. Smith, for his outstanding contributions in the development of British gas turbines; *Wakefield Gold Medal*, J. Martin, for his work on ejector seats; *George Taylor (of Australia) Gold Medal*, W. Tye, for his paper on "Modern Trends in Civil Airworthiness Requirements"; *Simmis Gold Medal*, H. H. Gardner, for his paper on "Structural Problems in Advanced Aircraft"; *Herbert Ackroyd Stuart Memorial Prize*, Dr. J. Seddon, for his paper on "Air Intakes for Gas Turbines"; *Edward Busk Memorial Prize*, H. Davies, for his paper on "Some Aspects of Flight Research".

#### Holweck Medal and Prize for 1952 : Prof. L. Néel

PROF. L. NÉEL, of the Institute Fourier, Grenoble, has been awarded the Holweck Medal and Prize for 1952 and will deliver the seventh Holweck Lecture at the Royal Institution, 21 Albemarle Street, London, W.1, on May 27 at 5 p.m., his subject being "Antiferromagnétisme et ferrimagnétisme". The Holweck Medal was founded by the Physical Society as a memorial to Fernand Holweck, director of the Radium Institute, Paris, and to other French physicists who were killed during the occupation of France in the Second World War, and the award is made annually by the Physical Society and the Société Française de Physique jointly. The recipient is alternately a French and a British physicist, distinguished for his work in experimental physics.

#### New Radio-Telescope for the University of Manchester

THE Department of Scientific and Industrial Research and the Nuffield Foundation have decided to provide a steerable radio-telescope for the University of Manchester, the total cost of which (estimated at about £336,000) will be shared equally between the two bodies. The telescope, which has

been designed in conjunction with Messrs. Husband and Co. (388 Glossop Road, Sheffield, and 70 Victoria Street, London, S.W.1), as consultants, will be in the form of a paraboloid aerial, 250 ft. in diameter, rotating on a platform 310 ft. in diameter. The height of the aerial, to the top of the horizontal axis, will be 185 ft. and, with the telescope directed horizontally, the total height will be 300 ft. Experimental work in relation to wind pressures on the structure has been carried out at the National Physical Laboratory, Teddington. The total weight of the telescope carried on the rails will be 1,270 tons, and the two main elevating-racks at each end of the horizontal axis have been obtained from the battleships *Revenge* and *Royal Sovereign*, which were recently broken up. The telescope will be set up at the Jodrell Bank Experimental Station, Cheshire, of the University of Manchester, and it is expected that the construction will be started this year and be completed in about four years time. The work at Jodrell Bank is under the direction of Prof. A. C. B. Lovell, with R. Hanbury Brown, J. G. Davies, Dr. T. Kaiser and C. G. Little as his principal assistants, and the main radio-telescope at present in use is a fixed paraboloid aerial 220 ft. in diameter. This research has already benefited from a five-year grant made by the Nuffield Foundation to the Physical Laboratories in 1945, and in 1947 the Department of Scientific and Industrial Research made appreciable grants for the work at Jodrell Bank and also to the University of Cambridge, which is the other principal centre for radio-astronomical research in Great Britain; at the latter the apparatus used is mainly of the interferometric type. The existing radio telescope at Jodrell Bank suffers from the disadvantage of having only a very limited movement, and the new instrument, which will be both bigger and, more important, able to scan the whole sky, should prove to be a valuable research tool in the hands of a department which has already done remarkable work. A recent communication from the Jodrell Bank Station appears on p. 746 of this issue of *Nature*.

#### Underwater Television

A NEW field of the application of television was opened up about a year ago when, at the request of the Admiralty, Marconi's Wireless Telegraph Co., Ltd., hurriedly assembled a television camera chain in an attempt to find the lost submarine *Affray*. A great deal of development work has since been carried out in co-operation with Siebe, Gorman and Co., Ltd.; and recently (April 17) a demonstration of the newly designed equipment was given in an experimental tank at the works of this Company. Among the special features of the apparatus shown were the use of the extremely sensitive image-orthicon camera tube, the enclosure of this camera and its associated components in a chamber capable of withstanding the water pressure prevailing at great depths, and the provision of remote-control facilities whereby the camera may be focused and directed by the operator who remains on the ship above. While the experimental tank could not simulate the effects of pressure at great depths, the picture signals were transmitted from the submerged television camera through about 450 ft. of cable to the viewing screen; and this could be extended to 1,000 ft. when necessary. Tests made under practical conditions at sea show that artificial illumination of the object is of doubtful value when the water is clear; but the