ment of the Beam system". They commented that ". . . it was largely due to the technical ability and persistence of its managing director that it ultimately prevailed and that Australia has the benefit of an up-to-date and extremely rapid means of communication with Great Britain. . . ".

In the field of Australian broadcasting, Fisk was a pioneer. He gave the first demonstration of wireless telephony in Australia in August 1919. Gramophone music played into a wireless transmitter was received in the lecture room of the Royal Society of New South Wales, several city blocks away. A year later he arranged a complete broadcast concert to a large audience in Parliament House, Melbourne.

He was foundation president of the Institution of Radio Engineers Australia and one of the earliest members of the Wireless Institute of Australia. He continued as chairman of directors of Amalgamated Wireless until 1945.

L. A. HOOKE

NEWS and VIEWS

Royal Society Research Professorship: Prof. W. S. Fyfe

PROF. W. S. FYFE, professor of geology in the University of California, Berkeley, has been appointed to a Royal Society research professorship. He will work at the University of Manchester and will take up his appointment in January 1966. Prof. Fyfe, who was born in New Zealand and has held appointments at the University of Otago and the University of California, is well known for his work in the field of experimental mineralogy and petrology.

Anglo-French Military Aircraft: Ministry of Aviation: Mr. J. A. Hamilton

MR. J. A. HAMILTON, formerly of the Royal Aircraft Establishment, Farnborough, has been appointed project director for the *Jaguar* strike/trainer and the variable-geometry combat aircraft to be developed jointly by the United Kingdom and France. He will be responsible within the Ministry of Aviation for the management of the two projects, acting in concert with corresponding directors in the French Direction Technique des Constructions Aeronautiques. Mr. Hamilton was educated in Scotland at Penicuik and Lasswade Secondary Schools; he graduated in engineering from the University of Edinburgh in 1943 and then joined the Marine Aircraft Experimental Establishment. He was engaged initially on the development of anti-submarine weapons and later became responsible for all flight research within the Establishment. In 1951 he joined the Aerodynamics Department of the Royal Aircraft Establishment and in 1952 he was appointed head of the Free-flight Division. During his stay at Farnborough he promoted the development of methods for conducting aerodynamic research using rocket-propelled test vehicles, eventually co-operating with the Australian Weapons Research Establishment to extend the technique into the régimes of hypersonic flight. Immediately before transfer to his present post he was head of the Projects Division of the Aerodynamics Department, and in this capacity responsible for the preliminary study of future military and civil aircraft.

Special Merit Promotions at the National Physical Laboratory: Mr. H. H. Pearcey

IT has recently been announced that Mr. H. H. Pearcey, of the Aerodynamics Division, National Physical Laboratory, has had a special merit promotion to deputy chief scientific officer. Mr. Pearcey is an internationally recognized authority in several branches of fluid dynamics, particularly the interaction between shock waves and boundary layers and the many intricate features of transonic, supersonic and separated flows. He has successfully used the results of his research in the progressive development of swept-wing aircraft for cruising at high subsonic, transonic and supersonic speeds by synthesizing methods for the design of the wing section and by evolving advanced section shapes. His 'peaky' type of aerofoil, with isentropic supersonic compressions, and the work that he initiated and supervised on aerofoils with thick trailing edges, including the use of automatic ventilation to reduce the base drag, are well known. So also is his important discovery of the intrinsic connexion between the variation of static pressure at the trailing edge of a wing and the effects of shock-induced and other types of boundary-layer separation. His suggestion that this could be used to predict the threshold of aircraft buffeting has been widely exploited. Mr. Pearcey also made a classic investigation of methods for suppressing the separations that cause the buffeting and other undesirable aerodynamic characteristics. In particular, he demonstrated how the properties of vortex generators can be utilized in this respect and has been instrumental in applying them to numerous aircraft, thus effecting many significant improvements in aerodynamic behaviour and in safety at both high and low speeds. During the course of his work, Mr. Pearcey has made vital contributions to the development of experimental methods for research in high-speed flow and has played a leading part in planning, designing and commissioning the fine range of high-speed wind-tunnels now operating in the Aerodynamics Division of the National Physical Laboratory. Since 1958 he has been responsible for the High-speed Flow Group at the Laboratory; in 1963 he was awarded the Bronze Medal of the Royal Aeronautical Society, for his contributions to aerodynamics, and gained the Wolfe Award of the Department of Scientific and Industrial Research, for an outstanding contribution to the Department's research programme.

Dr. R. C. Lock

DR. R. C. LOCK, of the Aerodynamics Division, National Physical Laboratory, has been promoted to senior principal scientific officer (special merit). Dr. Lock is perhaps best known in aviation circles for his outstanding theoretical and experimental research that has produced aerodynamic design methods which render the concept of shock-free, low-drag flow—derived from the abstract infinite yawed wing—a reality for the finite-wing/fuselage combinations of practical aircraft, even for supersonic flight speeds. His papers on this subject are well established and extensively used by aircraft designers; one, on wing planform design, won the Royal Aeronautical Society's Edward Busk Memorial Prize for 1962. Dr. Lock is a leading figure in swept-wing research and plays a prominent part in several programmes in this and related fields that are co-ordinated between the National Physical Laboratory and other establishments in the United Kingdom, Europe and the Commonwealth. However, his reputation is more widely based than this. Already, before joining the Laboratory in 1954, he had had a brilliant career at Cambridge, and this had been interrupted at the end of the War by a brief but successful spell at the Royal Aircraft Establishment working on problems of aircraft design. At Cambridge he won the University Mayhew Prize for the best applied mathematics candidate in the Mathematics Tripos, Part III, and was awarded a research fellowship at Gonville and Caius College during the tenure of which he made important contributions in the fields of hydrodynamic stability and magnetohydrodynamics. At the National Physical Laboratory he first turned his attention to in-