

he remained until 1908, engaged chiefly upon submarine design work. He was then appointed overseer for submarine hulls at Messrs. Vickers' Works at Barrow-in-Furness, where he remained four years, during which period he laid the foundation of his future airship work through being able to watch the construction of Naval Airship No. 1, the first British rigid airship, which was built at Barrow while he was there. From Barrow he was appointed, in 1913, Admiralty overseer at Messrs. Armstrong's works at Newcastle-on-Tyne for the construction of H.M.S. Malaya and various submarines, where he remained until December, 1914, when he sailed for America as Admiralty overseer of the construction of submarines and M.L. boats in the United States. He also went to Canada, where he supervised the erection and testing of these boats before returning to England to undertake airship design work under Mr. A. W. Johns, in the Department of Naval Construction at the Admiralty, at the end of 1915; being immediately responsible for the work of the airship design staff then formed.

It was soon after this that he produced the design of the "23X" class of rigid airship. The design, of which only R27 and R29 were built, was approved in spite of considerable opposition owing to the absence of a structural keel, there being merely a corridor through the hull which was not a strength member. In 1917, on the reorganisation of airship work in the Admiralty, he assumed the primary responsibility for airship design by taking charge of the Design Section of the department of the Director of Production (Airships) under the Navy Controller. It was during this period that the design of R38, which incorporated many original features, was prepared. On leaving the Admiralty in 1920 for the Air Ministry, he became Superintendent of Airship Construction and Design at the Royal Airship Works, Cardington.

Campbell was unquestionably the most experienced and foremost airship designer in this country, and had, outside Germany, a unique knowledge of the problems of rigid airship design and construction. He had the fullest confidence in the future of airships, and was a firm believer in the importance of progressive increase in size. For the head of a department he assumed an unusual amount of personal responsibility for the work, and was never content to leave the smallest detail to others. He was always particularly anxious to study the results of his work in practical flight, and had been on all the trial flights of R38, and had succeeded in obtaining the somewhat reluctant permission of his superiors to his embarking in the airship when she should leave for America.

He had done much proselytising work to arouse both technical and public interest in airships, among the lectures he gave being one before the Institute of Naval Architects on "The Development of Airship Construction," on April 10th, 1919. He was elected an Associate Fellow of the Society on March 16th, 1920, which was followed by his election to Fellowship on April 19th this year. On April 25th last, at the request of the Society, he read a Paper on "Airship Transport," at the Olympia Efficiency Exhibition.

FLIGHT LIEUTENANT J. E. M. PRITCHARD, O.B.E., A.F.C., F.G.S., A.F.R.Aë.S.

John Edward Maddock Pritchard was born at Leighton Buzzard in 1889, and was of Welsh ancestry. He was educated privately and at Trinity College, Cambridge, whence he proceeded to the Royal School of Mining, South Kensington, where he graduated First Class in mining surveying. He then took up the career of a mining engineer, and was at one time engaged upon one of the most important mining surveys ever carried out in this country, having been elected a Fellow of the Geological Society of London some time previously. His interest in aeronautics was not confined to his war experience, as he had made several flights in the early days of aviation with, amongst others, the late S. F. Cody.

He joined the Royal Naval Air Service as a Flight Sub-Lieutenant on May 24th, 1915, and took a preliminary course in balloon piloting and aerostatics at the Kite Balloon Training Station at Roehampton. From there he proceeded to Kingsnorth R.N. Airship Station, in August of the same year, from where he was posted to Polegate as captain of an S.S. airship. He remained at Polegate until April, 1916, when he was sent out to the airship station at Mudros, where anti-submarine patrols were carried out in conjunction with the Allied Fleets. While in the Mediterranean Pritchard contracted dysentery, and was ordered home in consequence, being posted on his return again to Polegate as Senior Flying Officer. He was promoted Flight Lieutenant at the end of 1916, and in the following year took command of a coastal type airship (C24) at East Fortune. He subsequently was captain of a Parseval airship (P6) at Howden, where he achieved the reputation of being one of the most capable and scientific pilots in the airship service. On the formation of the Airship Department at the Admiralty, Pritchard was appointed, in September, 1917, to the staff, where he was responsible for the maintenance of and supply of spare parts for rigid airships, and also became acceptance pilot of rigid airships as these were taken over from the constructors by the Superintendent of Airships, representing the flying side of the service. On the formation of the Royal Air Force, on April 1st, 1918, he was appointed acting Major (S.O.2), having been promoted Flight Commander in the previous January. From then onwards perhaps his most important work, apart from his acceptance duties, was his collaboration with the Air Intelligence Department of Home Forces G.H.Q., at Whitehall, in extracting, from the information obtained during and after Zeppelin raids in this country, technical data of incalculable value as to the development of airship design and practice in Germany. In the course of this work he examined several batches of Zeppelin crews, on one occasion visiting France for the purpose of interrogating the crew of L49, and assisted in the translation of innumerable log-books and other documents which proved a mine of information, which was embodied in a series of reports the importance of which it is impossible to over-estimate. As the natural outcome of this experience, Pritchard was sent to Germany in December, 1918, as technical airship officer under Admiral Browning on the British Naval Section of the Inter-Allied Armistice Commission. He returned with a mass of further information, which he made available to others in his usual clear and concise manner. In July, 1919, Pritchard represented the Air Ministry on the Atlantic flight of R34, and on the arrival of the airship over the landing field at Long Island volunteered to land by parachute in order to take charge of the ground landing party in the absence of Major Fuller, who had proceeded to another emergency landing ground where it had been thought that R34 would be compelled to land through shortage of petrol. Since October 22nd, 1919, Pritchard had been in the Lighter-than-Air Section of the Air Ministry Research Department as acceptance pilot, receiving a short service commission as Flight Lieutenant on January 8th, 1920.

As a pilot he combined to an unusual extent flying ability with scientific knowledge, which made him one of the most valuable members of the airship service. He was particularly notable for tracing to its source any unusual phenomenon which might occur during the flight of an airship and for his grasp of the lines of development required for the improvement of airships. It may be said of all his work that he laboured indefatigably for the good of the airship service in general and was always anxious to make available for all any knowledge which he obtained. He was of an unusually attractive disposition; never too busy to give assistance or advice, always cheery, and a most amusing and enlivening companion.

Pritchard was elected an Associate Fellow of the Society on February 17th, 1920, and was a member of the Candidates and Library and Publications Committees. He lectured before the members on "Rigid Airships and Their Development" on February 4th, 1920.