

## A KEY TO AIR SAFETY

Marconi's launched their new system of radar for air traffic control with a special exhibition of it working at Rivenhall.

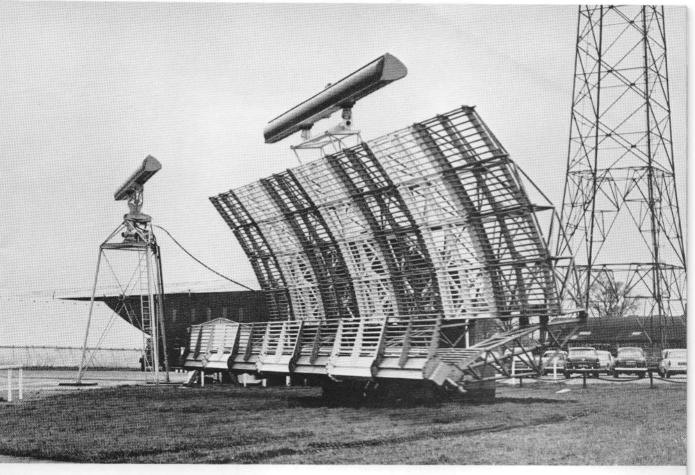
Top people in the aeronautical world came to assess for themselves the new SECAR, or secondary radar, which we have designed in conjunction with Compagnie Française Thomson-Houston. Secar simplifies the problems of handling air liners as they approach or depart from airports, and frees the Air Traffic Control Officers of a mass of communications yet presents them with accurate information for their extremely responsible jobs of bringing every aircraft in safely.

Secar is radar with communications combined. It can find out, automatically, information from air-

G. N. S. Taylor, Manager, Air Traffic Control Group, Radar Division, right, and D. E. Eastaugh, Chief of Systems, with an eleven-inch bright display at the exhibition of secondary radar at Rivenhall

The secondary radar (SECAR) display and the Secar control panel being demonstrated by Robin Webb, Systems Section, Air Traffic Control Group, to a number of important visitors including overseas people at the Rivenhall exhibition





Part of the Secar exhibition at Rivenhall. In the foreground is an S 264A primary radar aerial with a Secar aerial mounted on it, and beyond is the Secar aerial on its own mounting, rotating in alignment with the primary aerial

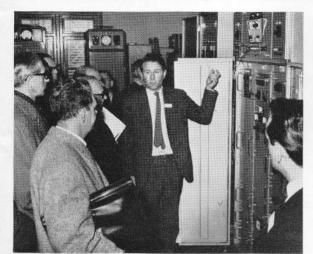
craft which hitherto has entailed contact by radio telephone with the air crews.

It gives not only positional information as obtained by normal radar techniques, but also identity, altitude to the nearest 100 feet, and other flight

information. It asks direct questions and obtains replies from each aircraft in the control area and sorts out the answers from other people's requests.

Harry Cole, technical co-ordinator of this project, one of the Baddow team who have lived with the

BELOW: The receiver of the interrogator-responser being demonstrated by Tony Beeton of Receiver and Signal Processing Group. RIGHT: George Slack, U.H.F. Generator Section, demonstrating the interrogator to visitors. From left to right in the front are Mr. B. E. P. Ritson from the Channel Islands, Mr. W. Jones from Eire, and Mr. V. Seydel from Belgium

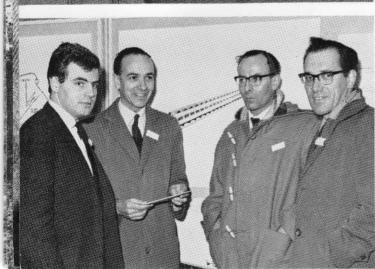












system since development started, explained to us that it was the remarkable result of Anglo-French co-operation in a private venture. This most advanced system was being produced to meet the time—not very far ahead—when an installation of this kind will be an official necessity at every airport. Our equipment, built on similar lines to the prototype, should be ready for delivery by the end of the year.

Basically, it can be described, he said, as a pulsecoded transmission from a ground interrogator via a narrow beam aerial. When the correct interrogation is recognized by a transponder in an aircraft, the transponder transmits to ground information previously fed into it by the air crew. Marconi's have devoloped the interrogator and the transponder, and C.F.T.H. the decoder.

This new radar system must surely be another key to air safety.

Two members of the Compagnie Française Thomson-Houston who took part in lectures and demonstrations at Rivenhall, Mr. H. Verillaud, left, and Mr. P. Desrieux, right, with M. Morgan, Assistant Director of Research, The Marconi Company

Left to right, Mr. G. Perronneau and Mr. de Mountlivault of C.F.T.H. with R. P. Raikes, Publicity Manager, The Marconi Company, and K. Brookes, Chief Accountant

Dr. G. N. Coop, Superintendent, Radar Data Generation Laboratories, one of the lecturers, with Henry Mason, Chief of Sales Section, responsible for commercial liaison at the exhibition, and Les King of Sales Section whose duties also included exhibition organization

Engineers from Baddow at the launching of their project. From left to right, Mick Cranmer, Mechanical Engineering Laboratory, and John Jackson, Angus McLeod, and Arthur Rogers, all of Frank Dutton's Aerial Research and Development Group

Exhibition operations centre with Jackie Clarke, right, Mr. Taylor's secretary who acted as receptionist, and Dick Williams, Sales Section, one of the party guides





The Secar display demonstration team with Radar Division engineers. From left to right, Roger Taylor, i/c Maintenance, Alan Miller, Baddow Technical Co-ordinating Engineer, Joe Caulfield, Maintenance, John Gibson, Maintenance, Bill McKenzie, Systems Section, Harry Cole, Assistant Chief of Systems Section, technical co-ordinator of the project, and at the P.P.I., Robin Webb of Systems Section

## **New Marconi subsidiary**

The English Electric Company Limited have agreed to purchase from Laughton and Sons Limited the whole of the issued capital of the latter's subsidiary Stratton and Company Limited, of Birmingham, in consideration for the allotment to Laughton of 220,000 ordinary shares of £1 each of English Electric, plus £104,157 in cash.

Stratton are the manufacturers of the Eddystone range of H.F. radio receivers and it is the intention that the Company should change its name to Eddystone Radio Limited and operate as a subsidiary of The Marconi Company Limited.

## Retiring from M.I.

Two of M.I.'s stalwarts have recently retired, G. T. M. Carman, Programme and Cost Engineer, and R. J. Brocklesby, Senior Quality Control Engineer.

Mr. Carman, who has been ill for some time, joined M.I. in 1941 and first worked in the drawing

office. Later he became mechanical designer and then assistant to E. Garthwaite, Chief Engineer. In this position he had a lot to do with the layout of the former engineers' department, and he handled the pricing of the Hinkley Point and Government contracts.

Mr. Brocklesby joined M.I. in 1939. He went to High Wycombe and was one of the first to come to St. Albans where he was in charge of the Test Department. More recently he has been concerned with the standards room, modernising its test equipment, and environmental test. His retirement will give him more time for his hobby as a radio 'ham'.

## New chairman of E.E.A.

At the Annual General Meeting of the Electronic Engineering Association held in March, Mr. R. Telford, General Manager of The Marconi Company was elected Chairman and Mr. R. J. Clayton, G.E.C. (Electronics) Ltd. was elected Vice-Chairman. Mr. Telford was Vice-Chairman of the Association during 1964.