

THE
Marconi

COMPANIES AND THEIR PEOPLE

VOLUME 7 : NUMBER 3 : OCTOBER 1956 : SIXPENCE



REMOTE EYE RADAR

THE flying display and the demonstrations of Britain's new and record-smashing aircraft are features of Farnborough Air Show. But also predominant at Farnborough is the show of all those things which keep aircraft flying, ensure their safety and assist in their control.

One of the highlights this year was the transmission of radar information from our radar operating at London Airport to viewers on our stand at Farnborough, and the relaying over the same link at the same time of television pictures showing aircraft leaving or arriving at the Airport.

This has been made possible by the use of a new microwave radar link equipped with high quality repeaters using travelling wave tubes and capable of relaying three radar or television pictures.

This equipment is the first of its kind. It foreshadows a new era in the effective use of radar information and is the result of our research and manufacture.

Without the use of a link it is neces-



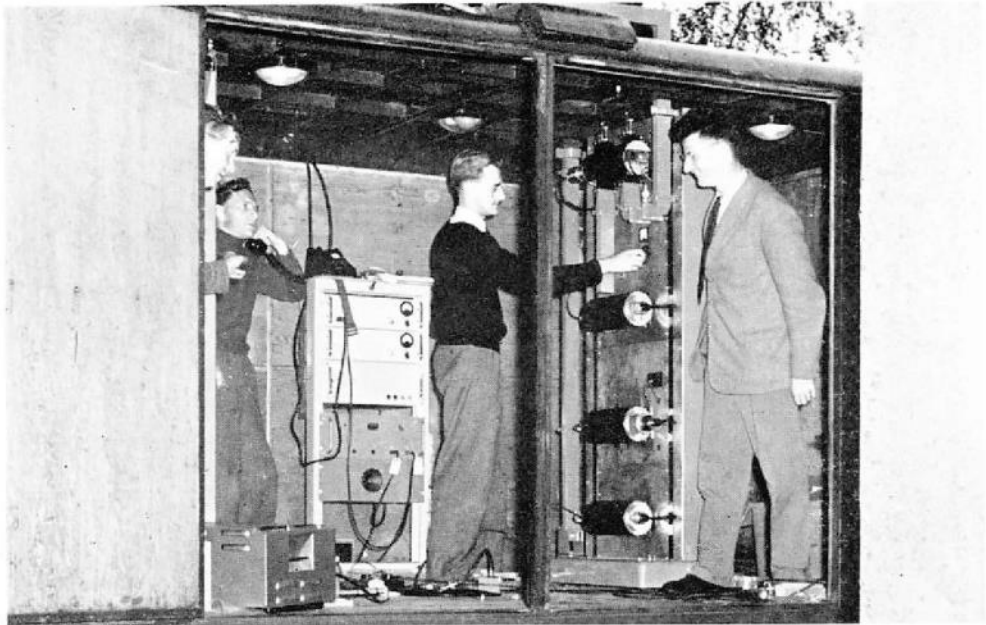
Our radar at London Airport. This is the aerial of the S.232 used for the control of aircraft leaving the London area. It is an all-weather equipment and will work in heavy rain. The Television O.B. van used in the demonstration was parked near this radar



The aerial of the radar link transmitter was mounted on a temporary tower at the Southern Air Traffic Control Centre, London Airport. Signals from the radar and from the television O.B. van were carried by cable to the link transmitter which was specially installed in the equipment room at S.A.T.T.C.



Left: Engineers examining part of the link transmitter equipment, from left to right, P. N. Sargeaunt, kneeling, of Baddow, H. P. Hall, D. A. Storrar and B. J. Clarke, of Radar Division



A composite radar and television signal from London Airport was received by a mobile repeater station at Blackhill on Chobham Ridge, and retransmitted to Farnborough. The four travelling wave tubes used in the repeater station are seen mounted in the rack on the right of the van. Working on their gear are Baddow Research engineers, left to right, W. L. Wright, E. C. Talboys, K. Bolwell, and J. C. Neville



LEFT: The Farnborough terminal unit by which the signal was received and carried to the exhibition stand



The combined resources of M.W.T. and M.I. with two Commonwealth associates presented an impressive selection of aeronautical radio, radar and test equipment on a stand designed and built at Chelmsford

sary for a radar display and operations centre to be set up near the scanning equipment, and a suitable site for a radar head is seldom equally suitable for a display centre. The new micro wave link overcomes this difficulty, and the radar head and the operations centre can now be miles apart—the link can be extended in 40-mile hops. 'Raw' information from remotely sited heads can also be fed into one centre.

At London Airport two television cameras were in use, one connected to the O.B. vehicle by coaxial cable, the other by S.H.F. radio link. The selected picture and commentary were routed to the microwave link transmitter which was also fed with two sets of P.P.I. radar picture signals from our S.232 radar head. The combined signals were transmitted to a repeater station at Blackhill and on to Farnborough. There visitors at our stand were able to watch from twenty miles away the movements of aircraft to and from London.



Radar Development Group Engineers in the cabin on the stand. Front, P. R. Max who was responsible for display units and, behind him, J. Gaskell. Standing is D. C. Jeffrey, in touch with London Airport on the radio-telephone. [The Aeroplane]

