Remote Presentation of Radar Information

THE USE of a wide-band radio link, such as the Marconi Type SX 101, to convey radar information from its source to the centre of operations, vastly increases the effective coverage and efficiency of any one station. It enables the radar aerial head to be located solely by considerations of coverage, irrespective of its suitability as an operations centre. Similarly the operations centre may be sited at any convenient place, resulting in economy in manpower, display equipment and accommodation.

Due to the complexity of radar information it is often not a practical proposition to transmit data by conventional means (lines, etc.) using bandwidth compression. The Type SX 101 link equipment is designed to transmit instantaneously the full services of the radar head and associated equipment, without degradation.

In a chain of radar stations and operations centres, a much wider overall picture of the strategic situation becomes possible when radar information from other sectors is made available at each centre. In addition the 'blind' area immediately above and around the radar station can easily be filled by information linked from an adjacent radar.

The Type SX 101 equipment uses travelling-wave tube amplifiers which, with their special properties of high gain with bandwidth and low noise figure, permit transmission over several repeater sections without degradation of the signal.