

# TYPE 48

RM23

## MONITOR VALVE CIRCUITS

In order to provide a means of checking the accuracy of transmissions at high speed an NR16A monitor valve (49) is fitted which can be coupled to the L/F or H/F transmitter (see figure q.)

The valve (49), filament transformer (366) and condensers (209)(210) are fitted on a shelf in the H/F main transmitting panel.

The anode and grid of the valve (49) are connected together and the L/F or H/F monitor coupling coils (207) or (208) are connected in circuit by one contact arm of the monitor C.O.S. (206). An additional contact arm on this switch (206) completes the 11 kW A.C. supply to the primary of the valve filament transformer (366) when the monitor C.O.S. (206) is set to "L/F" or "H/F".

During the marking periods of signalling R/F currents induced in the coupling coil (207) or (208) are rectified by the valve (49) and applied to a 0.1 mfd smoothing condenser (210). This condenser (210) is connected to the undulator which is used for high speed reception in the high speed bay. Transmissions can thereby be checked and recorded by the automatic high speed tape recording apparatus. A 0.1 mfd P/F by-pass condenser (209) is connected between the coupling coils (207)(208) and earth to prevent R/F currents being set up in the connecting leads to the undulator.

