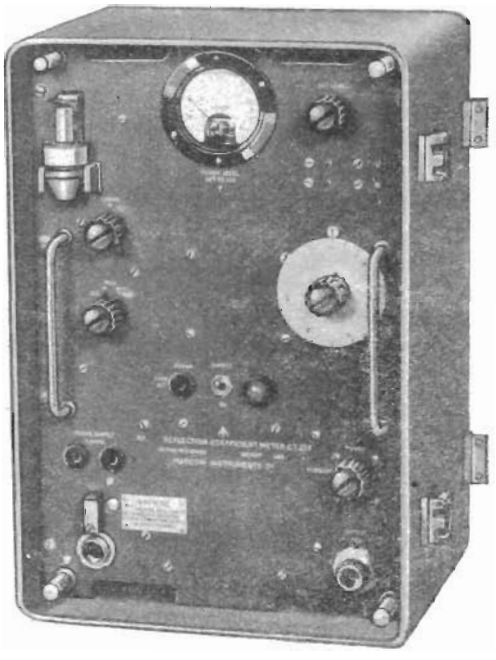
A.P.62275 REFLECTION-COEFFICIENT-METER (125 AND 280 Mc/s) CT217

(Joint-Services Designation:- Reflection Coefficient Meter (125 and 280 Mc/s) CT217)

SUMMARY OF DATA



REFLECTION-COEFFICIENT-METER CT217

PURPOSE

Measurement of voltage standing wave ratio in VHF and UHF coaxial-feeder systems at two spot frequencies (125 and 280 Mc/s).

BRIEF DESCRIPTION

A power oscillator set to the spot frequency feeds, through a directional coupler, an output socket to which is connected the load under test. The directional coupler is simply part of a measuring system and abstracts a small proportion of the power flowing towards or from the load according to the switch position of the coupler. The energy picked up by the coupler is fed through a piston attenuator to a superheterodyne receiver, the i.f. of which is rectified, the resultant d.c. operating a meter. The CT217 measures the voltage of the reflected wave and that of the incident wave, the ratio of the two being the reflection coefficient. From this value, the meter is calibrated to read v.s.w.r. directly. A matched load and connectors for standard equipments are provided with the instrument.

PERFORMANCE

Frequency. Spot frequencies at 280 Mc/s ± 4%
and 125 Mc/s ± 5%

Output Impedance. 75 ohms

Voltage Standing Wave Ratio 0.1 to 0.95 Accuracy 5% at OUTPUT socket

POWER REQUIREMENTS AND CONSUMPTION

115, 180, 200, 210, 220, 230, 240, 250 volts (all taps nominal ± 6%)

50 to 500 c/s ± 10%.

Consumption 65 Watts.

PHYSICAL DATA

Weight	40 lb approx.
Height	17½ in.
Depth	13 in.
Width	12½ in.

NEAREST COMMERCIAL EQUIVALENT

None.

ESTABLISHMENT LIST

E 1115

HANDBOOK

B.R.1771(17)

PRODUCTION SPECIFICATION

160:1