

TYPES 262R, 262(2)R AND 262(6)R

262R

SUMMARY OF DATA

PURPOSE

Associated radar set of either the C.R.B.F.D. Mk. 5 fitted as part of the Medium Range System Mk. 8 or G.W. Director Mk. 21, fitted as part of the Guided Weapon System Mk. 21.

On new installations, Type 262R is fitted in both a.c. and d.c. ships. When Type 262R Units are fitted in modified Type 262Q cubicles on d.c. ships the designation is Type 262(2)R, and on a.c. ships, Type 262(6)R.

BRIEF DESCRIPTION

Radar Type 262R, fitted in C.R.B.F.D. Mk. 5, is part of the M.R.S.8. The radar beam is very narrow and the set is therefore not suitable for all-round searching and detection of targets. Range and Bearing of the target to be engaged is provided by the Gun Direction System. Type 262R then searches a small amount in range, bearing, and elevation (range ± 750 yards about the mean range, bearing $\pm 5^\circ$, elevation at 5° per second). When the target is detected, the search stops automatically, the radar beam is locked-on to the target and the set provides auto ranging under all conditions of operation and auto-following as applicable.

The majority of the radar operating controls are on the Control Door. Certain controls are duplicated on the C.O.'s Console. It should be noted that the Auto-Radar Switch on the Control Door is at all times left in AUTO.

PERFORMANCE

Frequency	: 9580 - 9900 MHz
Wavelength	: 3.03 - 3.13 cm
Power Output	: Approximately 24 kW (peak)
Pulse Repetition Frequency	: 1500 pulses per second, or 1667 pulses per second
Pulse Duration	: 0.5 microsecond
Beam width	: 5.2° (6 dB down)
Intermediate Frequency	: 30 MHz
Receiver Bandwidth	: Greater than 3 MHz between 3 dB points

MAJOR UNITS

The units are housed in watertight cubicles as follows:-

Cubicle F1 -	1.	AP 172181	Cabinet, Control
	2.	AP 172165	Modulator Unit
	3.	AP 172161	Rectifier Unit
	4.	AP 172163	Servo Unit
	5.	AP 172162	Search Unit
Cubicle F2 -	6.	AP 172180	Control Door
	7.	AP 172164	Auto Strobe Unit
	8.	AP 172167	Cathode Ray Unit
Cubicle H -	9.	AP 172182	Cabinet, T/R
	10.	AP 172160	Transmitter-Receiver Unit
Cubicle J -	11.	AP 172183	Cabinet, R.T.U.
	12.	AP 172166	Range Transmitting Unit
Cubicle K -	13.	AP 172184	Cabinet, Blower
	14.	(a) AP 54208	Blower Unit for d.c. installations
		(b) AP 66753	Blower Unit for a.c. installations
	15.	AP 172168	Control Unit fitted as integral part of C.O.'s Console

AERIAL OUTFIT

Aerial Outfit APE(2) which consists of a parabolic reflector fed by a flare from the waveguide system. The aerial reflector rotates at 1800 r.p.m.

POWER REQUIREMENTS

440 V 60 Hz 3-phase for radar generator in a.c. ships.
220 V d.c. for radar generator in d.c. ships.

HANDBOOKS

BR 2302(A) and BR 2302(B) Series

ESTABLISHMENT LISTS

E 1281, E 1331