

TYPE 975(1),(2)

975

SUMMARY OF DATA

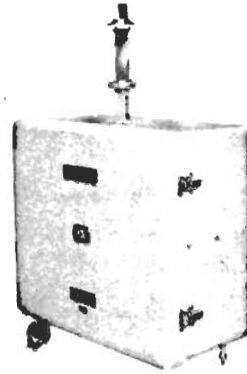
PURPOSE

A close range high definition surface warning radar used principally for pilotage and navigation. High land masses etc. can be detected out to 48 miles. Fitted in small ships such as Frigates, C.M.S., I.M.S., R.F.A.

BRIEF DESCRIPTION

The Transmitter-Receiver is contained in a case of mild steel which is designed for bulkhead mounting. The case contains the Modulator, the Magnetron, the Local Oscillator, the R/F Head, a Monitor Cavity and the Head Amplifier.

The Display Outfit which may be table or pedestal mounted, contains a 12 in c.r.t. with preset electrostatic focusing. All operating controls are mounted on the front panel of the display. The Main I.F. Signal Amplifier is also contained in the display.



TRANSMITTER-RECEIVER RADAR

FREQUENCY AND WAVELENGTH

9320 MHz - 9500 MHz (3 cm approx).

POWER OUTPUT

50 kW (Peak)

PULSE REPETITION FREQUENCY

1100 p/s.

PULSE DURATION

0.17 or 0.32 μ s (controlled by Range Switch)

INTERMEDIATE FREQUENCY

60 MHz

RECEIVER BANDWIDTH

12 MHz

RANGE DISCRIMINATION

Better than 35 yards on short pulse,
better than 70 yards on long pulse.

MINIMUM RANGE

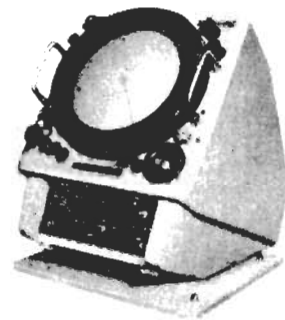
Better than 35 yards

BEARING ACCURACY

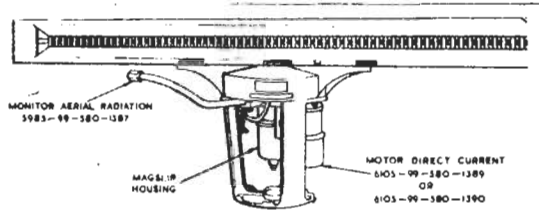
Better than 1 degree

BEARING DISCRIMINATION

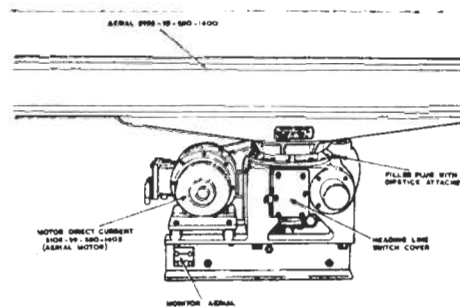
Aerial 6 ft Outfit AZF -
1.2 degrees
Aerial 10 ft Outfit AZG(1)/AZG(2)
0.7 degrees.



DISPLAY OUTFIT JUC1/2



AERIAL 6 FT OUTFIT AZF



AERIAL 10 FT OUTFIT AZG(1)

(For Aerial Outfit AZG(2) see over)

MAJOR UNITS

NATO STOCK NO.	DESCRIPTION	PHYSICAL DATA			
		HEIGHT	WIDTH	DEPTH	WEIGHT
5840-99-580-1392	Transmitter Receiver Radar	1 ft 4 in	1 ft 6 in	9 in	93 lbs
5840-99-580-1380	Indicator Azimuth Range (JUC1)	1 ft 10 in	1 ft 5 in	2 ft 3 in	110 lbs
or					
5840-99-580-1397	Indicator Azimuth Range (JUC2)	1 ft 10 in	1 ft 5 in	2 ft 3 in	110 lbs
5840-99-521-3419	Indicator, Azimuth Range (JUC4)	1 ft 10 in	1 ft 5 in	2 ft 3 in	110 lbs
5840-99-580-1381	Control Indicator	1 ft 5 in	1 ft 2 in	7 1/2 in	45 lbs
5840-99-580-1384	Power Supply	1 ft 2 in	1 ft 0 in	5 in	21 lbs
6125-99-580-1395	Motor Generator (d.c.)				208 lbs
or					
6125-99-580-1396	Motor Generator (a.c.)				290 lbs
	AERIAL OUTFITS				
5985-99-580-1388	Aerial 6 ft Outfit AZF				113 lbs
5985-99-580-1400	Aerial 10 ft Outfit AZG(1)/(2)				} 300 lbs
and					
5985-99-580-1401	Pedestal Aerial (AZG(1))				
5840-99-519-5460	Pedestal, Antenna (AZG(2))				

ASSOCIATED AERIAL OUTFITS

Aerial 6 ft Outfit AZF. A six foot end-fed slotted waveguide radiator. Used with Type 975(1).

Aerial 10 ft Outfit AZG(1)/(2). A ten foot end-fed slotted waveguide radiator, together with a Pedestal turning mechanism. Used with Type 975(2).

ASSOCIATED DISPLAY OUTFITS

Display Outfit JUC(1). A 12 in watertight Display with range strobe indication in nautical miles and cables.

Display Outfit JUC(2). A 12 in non-watertight Display with range strobe indication in yards.

A maximum of two Display Outfits JUC(1) or JUC(2) or a combination of these two outfits may be used.

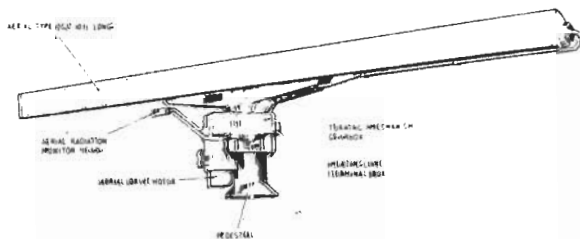
Display Outfit JUC(4). A 12 inch watertight Display for use with Computer, True Motion, Outfit QAB

POWER REQUIREMENTS AND CONSUMPTION

440 W Hz 3 phase 2 kW approx.
220 V d.c. 2 kW approx.

HEAT DISSIPATION

Transmitter-Receiver	200 W
Control Indicator	25 W
Indicator (Display)	170 W
Power Supply (Power Unit)	70 W
Motor Generator a.c. or d.c.	1500 W



HANDBOOK

BR 2351 (Type 975)

ESTABLISHMENT LISTS

E1349 Type 975
E1350 Aerial Outfits AZF/AZG
E1351 Display Outfits JUC(1) and JUC(2)
E1203 Waveguide Outfit Size 16

AERIAL 10 FT OUTFIT AZG(2)

INSTALLATION SPECIFICATION

8913 and Addenda A & B
8825 (Waveguide Size 16)