

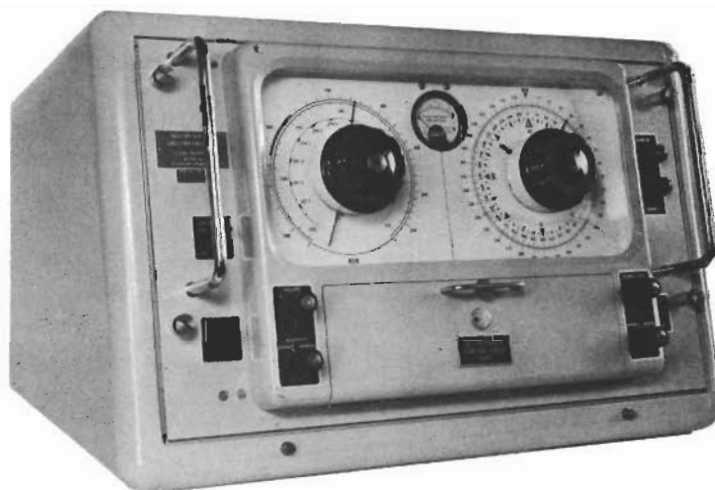
MF DF OUTFIT FM16
(MARCONI TYPE N5020)

FM16

SUMMARY OF DATA

PURPOSE

A Ship's Automatic, MF direction finder of the servo-driven type, with switching facilities for reversion to manual operation if required. The single act of tuning in a signal displays an unambiguous bearing.



BRIEF DESCRIPTION

The equipment embodies the Bellini-Tosi, fixed loop system, the rotatable element being a servo-driven goniometer Coil. In auto operation a signal from the loop system, present only when the gonio is displaced from the null point, is used in conjunction with a signal from a vertical aerial, to produce a low frequency error signal. This error signal drives a servo motor that rotates the gonio so as to remove the error towards the null point. The vertical aerial is to be shared with Alarm, Radio Outfit SQA, to which it is normally connected, but is automatically switched to FM16 when the latter is brought into operation.

FREQUENCY

250-550 kHz

I.F.

110 kHz

POWER SUPPLY

115/230 V, 50/60 Hz, 115 W for D.F. set
and
24 V d.c., 3 A for Quadrantal Correction Box
115/230 V, 50/60 Hz, 30 W - Anti-Con Heater

Heat Dissipation of the order of 150 W

PHYSICAL DATA

	Height	Width	Depth	Weight
D.F. Set 5825-99-520-1078	15½ in (40.0 cm)	22 in (55.9 cm)	17½ in (44.4 cm)	110 lb (50 kg)
Correction, Quadrantal 5825-99-520-1079	9½ in (23.3 cm)	13 in (33 cm)	3¾ in (9.5 cm)	10 lb (4.5 kg)
Antenna 5985-99-519-9975	40 in (101.6 cm)	30½ in (77.5 cm)	30½ in (77.5 cm)	60 lb (27.2 kg)

AERIAL OUTFIT (WHIP)

Either AWN or AWT will be allocated to act as the vertical aerial for outfit FM16. If a rigged wire aerial is to be used, an outfit in the Series AHR-AHY may be specified.

COMPASS SAFE DISTANCES

The minimum safe distances from the appropriate Grades of Compass is:

	Grade		
	I	II and III	IV
D.F. set	12 ft	7½ ft	6 ft
Loop Antenna	2 ft	1½ ft	1 ft

ESTABLISHMENT LIST

S1571

HANDBOOK

BR 2494

INSTALLATION SPECIFICATION

B1021