

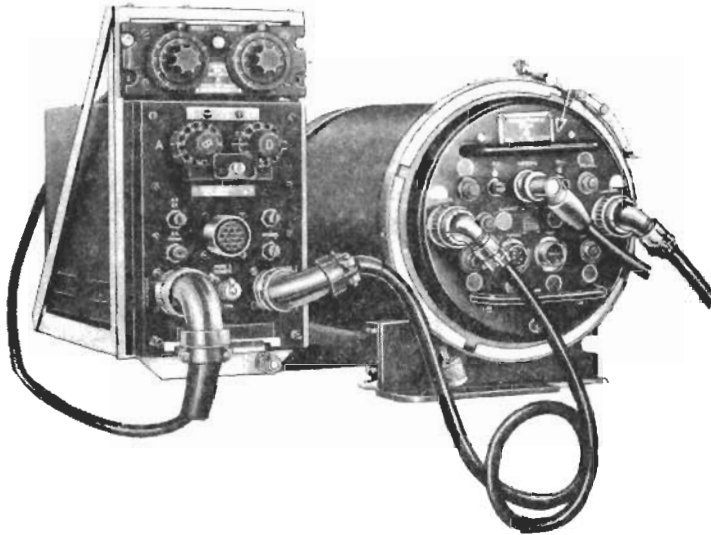
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BR 333(1)
Original

RADAR TYPE 955M

955M

SUMMARY OF DATA



PURPOSE

I.F.F. Mark 10 transponder with Selective Identification Feature (S.I.F.) for small craft and submarines.

BRIEF DESCRIPTION

The main units are of Ministry of Aviation design, with Admiralty pattern control unit, rack and connectors which enable the equipment to be used in ships. Type 955 is converted to Type 955M by the addition of S.I.F. Outfit SNC.

The interrogations are received as pulse pairs on a frequency of 1030 MHz. These are converted to single pulses in the receiver section of the transponder and fed to the coding unit, which generates a pulse train for each pulse fed in. The pulse trains, the composition of which is set by controls on the front of the coding unit and control unit 6465, are fed to the modulator of the transmitter section of the transponder. The transmitter output is fed to the aerial and radiated on 1090 MHz as replies to the interrogations.

The equipment may be converted to basic I.F.F. operation by inserting a 'Navy' function plug in the transmitter-receiver in place of the 'S.I.F.' function plug which is used for S.I.F. operation. In this condition the S.I.F. coding circuits are bypassed and the aerial will radiate one pulse for each pulse pair received.

FREQUENCY

1030 MHz reception. 1090 MHz transmission.

POWER OUTPUT

500 watts peak

PULSE REPETITION FREQUENCY

Up to 2500 pulses per second (depending on interrogation).

PULSE DURATION

0.5 microsecond (the transponder normally transmits a train of pulses).

RECEIVER BANDWIDTH

10-12 MHz at 6 dB below maximum.

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MAJOR UNITS

Transmitter-Receiver TR 6061.
AP 71395 Control Unit Design 142 Transponder.
Coding Unit 6466, with Control Unit 6465 (Part of S.I.F. Outfit SNC).

ASSOCIATED AERIAL OUTFIT

AMA in surface craft, AMJ or AMK in submarines.

PHYSICAL DATA

	Height	Width	Depth	Weight
TR 6061	9 $\frac{1}{2}$ in	9 $\frac{1}{2}$ in	14 in	30 lb
Control Unit AP 71395	6 $\frac{1}{2}$ in	4 in	4 $\frac{1}{2}$ in	1 lb
Coding Unit 6466 and Control Unit 6465 in rack }	12 $\frac{1}{2}$ in	6 $\frac{1}{2}$ in	10 $\frac{3}{16}$ in	14 lb

POWER REQUIREMENTS

115 V, 400 Hz single phase a.c. 140 watts. 24 V d.c. 53 watts.

HEAT DISSIPATION

190 watts

HANDBOOKS

Type 955/M	BR 2188 (AP 2887N Volumes 1 and 6).
Aerial Outfit AMA	NAVSHIPS 91597 (MSA) Instruction Book for Antenna Assembly AS-177/UPX(MSA)
Aerial Outfit AMJ	Summary of Data for Confidential Radio Equipment.
Aerial Outfit AMK	CB

ESTABLISHMENT LISTS

Type 955/M	E1214
S.I.F. Outfit SNC	E1322
Aerial Outfit AMA	E1171

INSTALLATION SPECIFICATION

8858

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