RESTRICTED

RADAR TYPE 955

SUMMARY OF DATA

PURPOSE

I.F.F. Mark 10 transponder for small craft and submarines.

BRIEF DESCRIPTION

Type 955 is the I.F.F. Mark 10 transponder fitted in small craft and submarines. The main unit is the Air Warfare Transmission-Receiver TR 6061, this being controlling by remotely Pattern 71395 Control Unit Design 142 Transponder.

The interrogations are received as pulse pairs on a frequency of 1030 MHz. These are converted to video signals in the receiver, which generate a single pulse for each appropriate interrogation. This pulse is fed to the modulator which in turn excites the transmitter, the output of which is fed to the aerial and radiated on 1090 MHz at a reply to the interrogation.

FREQUENCY

1030 MHz Reception.
1090 MHz Transmission.

POWER OUTPUT

500 watts peak.

PULSE REPEITION FREQUENCY

Up to 200 pulses per second (depending on interrogation).

PULSE LENGTH

0.5 microsecond.

RECEIVER BANDWIDTH

10-12 MHz at 6 dB below maximum.

MAJOR UNITS

TR 6061 Transmitter-Receiver
AP 71395 Control Unit Design 142 Transponder.

PHYSICAL DATA

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<tr>
<th>Height</th>
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<th>Depth</th>
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<tbody>
<tr>
<td>TR 6061</td>
<td>94 in</td>
<td>48 in</td>
<td>34 in</td>
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<tr>
<td>Control Unit</td>
<td>63 in</td>
<td>4 in</td>
<td>36 in</td>
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ASSOCIATED AERIAL OUTFIT

AMA in surface craft
AMA in submarines.

POWER REQUIREMENTS

125 V, 300-2600 Hz single phase a.c. 350 watts
24 V d.c. 150 watts. (This allows for additional equipment to be added later.)

6.27
HEAT DISSIPATION
110 watts. (without additional equipment.)
Fig. 1. IFF system: block diagram
Fig. 1. TR.4585: general view
Fig. 4. TR.4985: block diagram