PURPOSE
A close range high definition surface warning radar used principally for gunnery 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 outboard 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 82 in. CRT with pre-cell electrostatic focusing. All operating controls are mounted on the front panel of the display. The Gain E.F. Signal Amplifier is also contained in the display.

FREQUENCY AND WAVELENGTH
9300 to 9400 MHz (3 cm approx).

POWER OUTPUT
50 kw (Peak)

PULSE REPETITION FREQUENCY
1200 p.s.i.

PULSE DURATION
0.17 or 0.32 ms (controlled by Range Switch)

INTERMEDIATE FREQUENCY
60 MHz

RECEIVER BANDWIDTH
12 MHz

RANGE DISCRIMINATION
Better than 50 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 AZ = 1.2 degrees
Aerial 10 ft Outfit AZ(1)/AZ(2) = 0.7 degrees.

(For Aerial Outfit AZ(2) see over)

RESTRICTED
MAJOR UNITS

<table>
<thead>
<tr>
<th>NATO STOCK NO.</th>
<th>DESCRIPTION</th>
<th>PHYSICAL DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5842-09-580-1392</td>
<td>Transmitter Receiver Range Indicator Azimuth Range (JUC1)</td>
<td>1 ft 6 in x 1 ft 6 in x 9 in</td>
</tr>
<tr>
<td>5842-09-580-1360</td>
<td>Indicator Azimuth Range (JUC2)</td>
<td>1 ft 10 in x 1 ft 5 in x 2 ft 3 in</td>
</tr>
<tr>
<td>5842-09-580-1397</td>
<td>Indicator, Azimuth Range (JUC3)</td>
<td>2 ft 10 in x 2 ft 5 in x 3 ft 5 in</td>
</tr>
<tr>
<td>5842-09-580-1319</td>
<td>Control Indicator</td>
<td>2 ft 15 in x 2 ft 5 in x 3 ft 5 in</td>
</tr>
<tr>
<td>5842-09-580-1381</td>
<td>Power Supply</td>
<td>2 ft 15 in x 2 ft 5 in x 3 ft 5 in</td>
</tr>
<tr>
<td>5819-99-580-1395</td>
<td>Motor Generator (a.c.)</td>
<td>2 ft 10 in x 2 ft 5 in x 3 ft 5 in</td>
</tr>
<tr>
<td>6128-99-580-1996</td>
<td>Motor Generator (a.c.)</td>
<td>1 ft 15 in x 1 ft 15 in x 4 in</td>
</tr>
</tbody>
</table>

ASSOCIATED AERIAL OUTFITS

Aerial 6 ft Outfit AZF. A six foot end-fed slotted waveguide radiator. Used with Type 976(1).

Aerial 10 ft Outfit AZF(1)(2). A ten foot end-fed slotted waveguide radiator, together with a Pedestal Turning Mechanism. Used with Type 976(2).

ASSOCIATED DISPLAY OUTFITS

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

Aerial 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.

Power Display Outfit JUC(4). A 12 inch watertight Display for use with Computer. True Motion. Outfit Q48

POWER REQUIREMENTS AND CONSUMPTION

240 V 50 cycles 3 kW approx.
220 V d.c. 2 kW approx.

HEAT DISSIPATION

Transmitter-receiver 280 W
Control Indicator 25 W
Display (JUC) 120 W
Power Supply (Per Unit) 40 W
Motor Generator a.c. or d.c. 1500 W

HANDBOOK

5200 (Type 976)

Establishment lists

5200 Type 976
5200 Aerial Outfits AZF(1)(2)
5204 Display Outfits JUC(1) and JUC(2)
5204 Waveguide Outfit 51C-43

Installation Specification

5819 and Appendix A & B
5820 (Waveguide Size 16)

6.46