PURPOSE
A high definition warning surface radar set for
principally for plotting and navigation. Type 974(1)
has a 12 in display. Type 974(2) has a 5 in display.

BRIEF DESCRIPTION
Type 974 is a radar set which gives high definition
of surface targets up to a maximum range of 26 miles. It
is capable of ranging down to 20 yards with a range
accuracy of the order of 2% of the indicated range.
Control of the equipment is effective from the main
display unit or one remote display unit (Display
Unit A). It can at present be fitted.

The Operations Room contains the receiver unit,
main display unit and azimuth stabilizer unit. The R.F.
head which comprises the monocular, transmitter and R.F.
section of the receiver is housed in the Aerial Qualit A.

FREQUENCY
9455 - 9655 MHz

WAVELENGTH
3.2 cm

POWER OUTPUT
7 kw (peak)

PULSE REPEITION FREQUENCY
1000 p/s

PULSE LENGTH
0.14 μs on 1 and 3 mile ranges;
0.18 μs on 8 and 26 mile ranges.

RECEIVER BANDWIDTH
30 Hz flat to within 3 db.

BEAM WIDTH
Vertical 23° Horizontal 1.6°

AERIAL ROTATION SPEED
24 revs per minute.

POWER REQUIREMENTS AND CONSUMPTION
A.C. Ships 440 volts 60 Hz 4 phase 1 kw
1.9 amp per phase (running)
9 amp per phase (starting)

D.C. Ships 110 or 220 volts d.c. 1 kw

HEAT DISSIPATION
- Receiver Unit 240 watts
- Display Unit 190 watts
- Remote Display Unit 100 watts
- Power Supply Unit 190 watts
- R.F. Head 90 watts
- Motor Driver Drive 250 watts
## MAJOR UNITS AND PHYSICAL DATA

<table>
<thead>
<tr>
<th>No. or Ref.</th>
<th>Description</th>
<th>115 V</th>
<th>220 V</th>
<th>Weight</th>
<th>Depth</th>
<th>Height</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A.C.</td>
<td>D.C.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amps</td>
<td>Watts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Watts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. or Ref.</th>
<th>Description</th>
<th>115 V</th>
<th>220 V</th>
<th>Weight</th>
<th>Depth</th>
<th>Height</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A.C.</td>
<td>D.C.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amps</td>
<td>Watts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Watts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ASSOCIATED AERIAL OUTFIT

Aerial Outfit A11 consisting of Reflector Unit, Pedestal Unit and Motor Scanner Drive. It houses the A.F. head.

### ASSOCIATED POWER SUPPLY OUTFIT

The necessary power supplies (80 V 1600 W a.c.) are derived from power supply units included as part of Type 974 and are not shown separately.

### REMARKS

Type 914 is the Commercial Double Marine Water Type 12, modified for service use.

## HANDBOOK

HANDBOOK

## ESTABLISHMENT LIST

<table>
<thead>
<tr>
<th>No.</th>
<th>1008</th>
</tr>
</thead>
</table>

## INSTALLATION SPECIFICATION

<table>
<thead>
<tr>
<th>No.</th>
<th>728</th>
</tr>
</thead>
</table>

### MAIN DISPLAY UNIT

<table>
<thead>
<tr>
<th>MAIN DISPLAY UNIT</th>
</tr>
</thead>
</table>

### REGULATOR UNIT

| REGULATOR UNIT | 6.44 |

### RESTRICTED

[Image]