DISPLAY OUTFIT JW
SUMMARY OF DATA

PURPOSE
Display Outfit JW is a projected PPI display used in Aircraft Direction Rooms and Operation Rooms for air direction and plotting compilation in conjunction with Type 22 series, 277 series, 560, 962 and 982.

POWER REQUIREMENTS AND CONSUMPTION
115, 220, 230, 236 or 440V 50-60 c.p.s. Single Phase 600W. Voltage tolerance ± 5%.
180V 500 c.p.s. 0.75 kW (approx.) (for transformer Des. 1377)

HEAT DISSIPATION
(for each display fitted)
Display Unit 300W approx.
Power Supply Unit 300W approx.

MAJOR UNITS
1. Pats. 61316 Bearing Conversion Unit Des. 3
2. Pats. 61503 Transformer Des. 1377
3. Pats. 10700 Display Unit EDM16/26
4. Pats. 10701 Range Marker Unit
5. Pats. 10702 Servo Amplifier Unit
6. Pats. 10703 E.A.T. Unit 25 kV
7. Pats. 10706 Video Amplifier and Focus Control Unit
8. Pats. 10705 Time Base Unit
9. Pats. 10706 Smoothing Unit
10. Pats. 10707 Brilliance Control and Test Time Base Unit
11. Pats. 10708 C.A.R. Unit
12. Pats. 10709 Control Panel, left
13. Pats. 10710 Control Panel, right
14. Pats. 10711 Power Supply Cabinet 1/2 Unit
15. Pats. 10712 Power Supply Cabinet 2 Unit
16. Pats. 10713 Power Supply Unit
17. Pats. 10714 Optical Mounting Frame Assembly

NOTES
1. One item 1 supplied for each Radar set to be displayed (but 560 only if it is displayed unmanned).
2. One item 2 only fitted irrespective of number of Display Outfits JW fitted.
3. Item 4 - 15 items and item 17 fitted in item 3.
4. One item 14 supplied for four or fewer Outfits JW fitted.
5. One item 15 to be supplied in addition to item 14 when 5 or 6 Outfits JW are fitted.
6. Quantities of item 16 to be supplied are as follows:
   4 for each item 14
   2 for each item 15.
### Physical Data

<table>
<thead>
<tr>
<th>Pattern No.</th>
<th>Description</th>
<th>Physical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>101700</td>
<td>Display Unit 20116/25</td>
<td></td>
</tr>
<tr>
<td>101711</td>
<td>Power Supply Cabinet (containing a Power Supply Unit)</td>
<td></td>
</tr>
<tr>
<td>101712</td>
<td>Power Supply Cabinet (containing 2 Power Supply Units)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weight, Width, Depth, Weight</td>
<td></td>
</tr>
<tr>
<td>20 lbs</td>
<td>4 feet 2 inches, 3 feet 7 inches, 250 lbs</td>
<td></td>
</tr>
<tr>
<td>40 lbs</td>
<td>2 feet 6 inches, 1 foot 9 inches, 225 lbs</td>
<td></td>
</tr>
</tbody>
</table>

### Brief Description

Display Outfit 3M comprises a projection type P.P.J., a Power Pack supplying the various power requirements of the Display Unit—a Bearing Conversion Unit and a Transformer. Range scales available are 100, 120, 90 and 60 nautical miles with provision for selecting one of three radar sets to be displayed. Internal sync. and signal are available for test purposes. Signals are displayed as high intensity *points* on a C.R.T. screen approx. 2 ins. in diameter and magnified to a diameter of approx. 20 ins. by means of an optical system. The image is projected on to a horizontal screen which is coated with a fluorescent afterglow layer.

### Handbook

R.3.2065(1)-47.

### Establishment List

E.1065.

### Installation Specification

B.772.
## DISPLAY OUTFIT JW(2)

### SUMMARY OF DATA

**PURPOSE**

Display Outfit JW(2) is a projected P.P.L. display used in aircraft direction and operations rooms normally in conjunction with radar Type 963 series, 976, 967 and 963.

### BRIEF DESCRIPTION

Display Outfit JW(2) comprises a projection type P.P.L. display and a separate power transformer supplying the various d.c. voltage requirements. Design scales are: 62, 96, 967, 963 and 965/967/963 marine miles. Provision is made to select from various inputs to be displayed. Targets are displayed as high intensity echoes on a C.R.T. screen approximately 5 inches in diameter and magnified by an optical system to a diameter of approximately 20 inches. The image is projected on to a horizontal display screen coated with a fluorescent layer to provide afterglow.

### MAJOR UNITS

<table>
<thead>
<tr>
<th>SF No.</th>
<th>Description</th>
<th>SF No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>103249 Indicator, Plan Position (includes lamp 2 to 11)</td>
<td>32</td>
<td>Control Indicator (Right)</td>
</tr>
<tr>
<td>2</td>
<td>101701 Calibrator (some markers) Unit 963</td>
<td>33</td>
<td>Optical Mounting Frame work assembly</td>
</tr>
<tr>
<td>3</td>
<td>101822 Servo Amplifier Unit 963</td>
<td>34</td>
<td>Schmidt Optical Mi.</td>
</tr>
<tr>
<td>4</td>
<td>101716 Sealed Amplifier Unit 963</td>
<td>35</td>
<td>ックルハッピ (EMI's Head Markers)</td>
</tr>
<tr>
<td>5</td>
<td>101705 True North Unit 963</td>
<td>36</td>
<td>6J76</td>
</tr>
<tr>
<td>6</td>
<td>101706 Rounding Unit 966</td>
<td>37</td>
<td>Oscillator Unit Design B (Ship's Head Markers)</td>
</tr>
<tr>
<td>7</td>
<td>101718 Weather Transmitter Unit 967</td>
<td>38</td>
<td>101243</td>
</tr>
<tr>
<td>8</td>
<td>101708 G.R.T. Unit 967</td>
<td>39</td>
<td>100327</td>
</tr>
<tr>
<td>9</td>
<td>101712 Video Amplifier Unit 967</td>
<td>40</td>
<td>101712</td>
</tr>
<tr>
<td>10</td>
<td>101709 brilliance Control Unit 967</td>
<td>41</td>
<td>101711</td>
</tr>
<tr>
<td>11</td>
<td>101709 Control Panel (Left)</td>
<td>42</td>
<td>101712</td>
</tr>
</tbody>
</table>

**NOTES:**

1. One only of either line 14 or line 15 is supplied per outfit, depending on type of radar in use. Line 15 will be supplied when a 963 is 963/967.
PHYSICAL DATA

<table>
<thead>
<tr>
<th>KP No.</th>
<th>Description</th>
<th>Height</th>
<th>Width</th>
<th>Depth</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>101790</td>
<td>Indicator, Plan Position</td>
<td>26 in</td>
<td>508 in</td>
<td>3 in</td>
<td>4 lb</td>
</tr>
<tr>
<td>102097</td>
<td>Power Supply Cabinet (8-inoutlet)</td>
<td>19 in</td>
<td>230 in</td>
<td>4 in</td>
<td>3 lb</td>
</tr>
<tr>
<td>102172</td>
<td>Power Supply Cabinet (6-inoutlet)</td>
<td>314 in</td>
<td>288 in</td>
<td>4 in</td>
<td>4 lb</td>
</tr>
<tr>
<td>102173</td>
<td>Power Supply Cabinet (9-inoutlet)</td>
<td>492 in</td>
<td>294 in</td>
<td>4 in</td>
<td>5 lb</td>
</tr>
<tr>
<td>105740</td>
<td>Power Supply Cabinet (4-outlet, cabinet open)</td>
<td>19 in</td>
<td>204 in</td>
<td>5 in</td>
<td>3 lb</td>
</tr>
</tbody>
</table>

POWER REQUIREMENTS AND CONSUMPTION

115 V, 220 V, 220-240 V or 115 V ± 5%, 50-60 Hz. Single Phase 665 W.
175 V, 255 W, Air-cooled 3-phase voltage.

HEAT DISSIPATION

Display Outfit : 300 W approximately
Power Supply Unit : 300 W approximately

HANDBOOK

BR 239a

ESTABLISHMENT LIST

1 1669

INSTALLATION SPECIFICATION

8 717

MAINTENANCE SCHEDULE

HVa