

DISPLAY OUTFIT JW

SUMMARY OF DATA

PURPOSE

Display Outfit JW is a projected PP1 display used in Aircraft Direction Rooms and Operation Rooms for air direction and plotting compilation in conjunction with Type 281 series, 277 series, 960, 982 and 983.

POWER REQUIREMENTS AND CONSUMPTION

115, 220, 225, 230 or 440V 50-60 c.p.s. Single Phase 650W. Voltage tolerance \pm 5%.

180V 500 c.p.s. 0.75 kW (approx.) (for transformer Des. 1377)

HEAT DISSIPATION (for each display fitted)

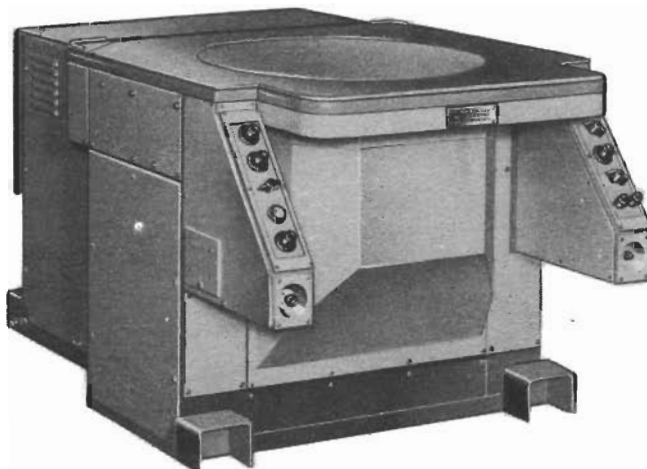
Display Unit 300W approx.

Power Supply Unit 300W approx.

MAJOR UNITS

- | | | | |
|-----------------|--|------------------|--|
| 1. Patt. 61316 | Bearing Conversion Unit Des. 3 | 10. Patt. 101707 | Brilliance Control and Test Time Base Unit |
| 2. Patt. 61503 | Transformer Des. 1377 | 11. Patt. 101708 | C.R.T. Unit |
| 3. Patt. 101700 | Display Unit SGM116/25 | 12. Patt. 101709 | Control Panel, left. |
| 4. Patt. 101701 | Range Marker Unit | 13. Patt. 101710 | Control Panel, right |
| 5. Patt. 101702 | Servo Amplifier Unit | 14. Patt. 101711 | Power Supply Cabinet - 4 Unit |
| 6. Patt. 101703 | E.H.T. Unit 25 kV | 15. Patt. 101712 | Power Supply Cabinet - 2 Unit |
| 7. Patt. 101704 | Video Amplifier and Focus Control Unit | 16. Patt. 101713 | Power Supply Unit |
| 8. Patt. 101705 | Time Base Unit | 17. Patt. 101714 | Optical Mounting Frame Assembly |
| 9. Patt. 101706 | Smoothing Unit | | |

- NOTES
1. One Item 1 supplied for each Radar set to be displayed (but 960 only if it is displayed unmixed).
 2. One Item 2 only fitted irrespective of number of Display Outfits JW fitted.
 3. Items 4 - 13 inc. 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.



DISPLAY OUTFIT JW AND POWER SUPPLY CABINET - 4 UNIT

PHYSICAL DATA

Pattern No.	Description	Physical Data			
		Height	Width	Depth	Weight
101700	Display Unit SGM116/25	2' 4"	4' 2½"	3' 7"	440 lb
101711	Power Supply Cabinet (containing 4 Power Supply Units)	4' 0½"	2' 4½"	1' 9"	448.5 lb
101712	Power Supply Cabinet (containing 2 Power Supply Units)	1' 7½"	2' 4½"	1' 9"	226 lb

BRIEF DESCRIPTION

Display Outfit JW comprises a projection type P.P.I., a Power Pack supplying the various power requirements of the Display Unit; --a Bearing Conversion Unit and a Transformer. Range scales available are 180, 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 "paints" 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

B.R.2065(1)-(7).

ESTABLISHMENT LIST

E.1060.

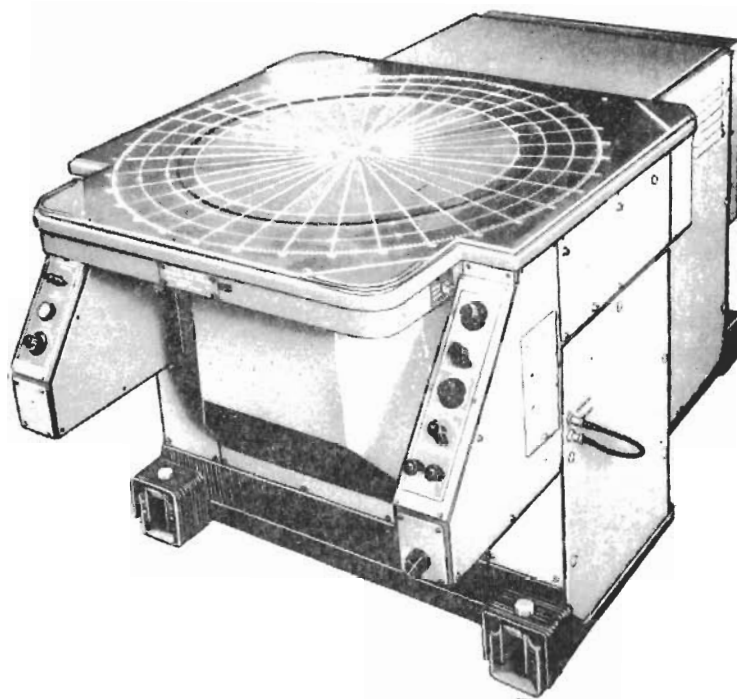
INSTALLATION SPECIFICATION

B.772.

DISPLAY OUTFIT JW(2)

JW(2)

SUMMARY OF DATA



DISPLAY OUTFIT JW(2)

PURPOSE

Display Outfit JW(2) is a projected P.P.I. display used in aircraft direction and operations rooms normally in conjunction with radar Types 965 series, 978, 982 and 983.

BRIEF DESCRIPTION

Display Outfit JW(2) comprises a projection type P.P.I. display and a separate power pack supplying the various d.c. voltage requirements. Range scales are: 60, 90, 120 and 180/350 nautical miles. Provision is made to select one of three radar inputs to be displayed. Signals are displayed as high intensity echoes on a c.r.t. screen approximately two 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

AP No.	Description	AP No.	Description
1.	103249 Indicator, Plan Position (includes items 2 to 14)	12.	103247 Control Indicator (Right).
2.	101701 Calibrator (Range Marker) Unit 503	13.	101714 Optical Mounting Framework Assembly (Schmidt Optical Box).
3.	101702 Servo Amplifier Unit 504	or 105229	
4.	101703 25 kV e.h.t. Unit 508 (includes Sealed Rectifier Unit).	14.	172730 Oscillator (Ship's Head Marker) Unit 915
5.	101705 Time Base Unit 514.	15.	62076 Oscillator Unit Design 8 (Ship's Head Marker).
6.	101706 Smoothing Unit 516.	16.	101713 Power Supply Unit SGD 101/01.
7.	101718 Heater Transformer Unit 626.	17.	105227 Power Supply Cabinet (One-Unit).
8.	101708 C.R.T. Unit 552	18.	103899 Power Supply Cabinet (Two-Unit).
9.	105222 Video Amplifier Unit 911.	19.	101711 Power Supply Cabinet (Four-Unit).
10.	105223 Brilliance Control Unit 912.	20.	101712 Power Supply Cabinet (Two-Unit, cabinet mounted).
11.	101709 Control Panel (Left).		

NOTES: 1. One only of either item 14 or item 15 is supplied per outfit, depending on type of radar in use. Item 15 will be supplied until stocks are exhausted except where Radar Type 978 is fitted.

RESTRICTED

BR 333(1)
Original

2. Supply of items 17, 18, 19 and 20 depends on number of items 16 fitted for Display Outfits JW and JYB. Single outfit installations have one item 17; installations with two outfits have one item 18; installations having three or four outfits have one item 19; installations with five or six display outfits have one each of items 19 and 20.

PHYSICAL DATA

AP No.	Description	Height	Width	Depth	Weight
103249	Indicator, Plan Position	28 in	50 $\frac{1}{2}$ in	43 in	440 lb
105227	Power Supply Cabinet (One-Unit)	18 in	22 $\frac{1}{16}$ in	24 $\frac{1}{2}$ in	176 lb
103899	Power Supply Cabinet (Two-Unit)	31 $\frac{1}{2}$ in	28 $\frac{1}{2}$ in	26 $\frac{1}{2}$ in	249 lb
101711	Power Supply Cabinet (Four-Unit)	48 $\frac{1}{2}$ in	28 $\frac{1}{2}$ in	26 $\frac{1}{2}$ in	450 lb
101712	Power Supply Cabinet (Two-Unit, cabinet mounted)	19 $\frac{1}{2}$ in	28 $\frac{1}{2}$ in	26 $\frac{1}{2}$ in	226 lb

POWER REQUIREMENTS AND CONSUMPTION

115 V, 220 V, 225-230 V or 440 V \pm 5%, 50-60 Hz. Single Phase 665 W.
120 V, 500 Hz. Aerial Reference Voltage.

HEAT DISSIPATION

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

HANDBOOK

BR 2394

ESTABLISHMENT LIST

E 1060

INSTALLATION SPECIFICATION

B 772

MAINTENANCE SCHEDULE

R5/8