

DISPLAY OUTFIT JT1

JT1

SUMMARY OF DATA

PURPOSE

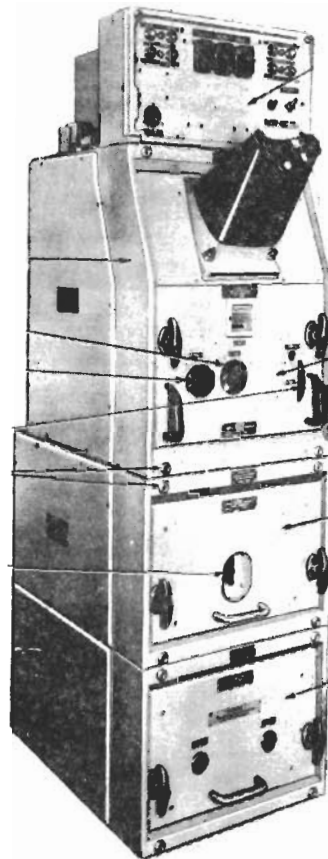
Display Outfit JT1 is a submarine short ranging display unit for use in conjunction with an X-band transmitter (Types 1000/1/2 Series), periscope aerial and torpedo computer.

BRIEF DESCRIPTION

Display Outfit JT1 is the accurate ranging panel for Transmitter/Receiver Radar 77A and Periscope Aerial Outfit AKS. The Display consists of a 6 inch A-scan long-persistence C.R.T. which is only brightened during the short transmission periods. The strobe spot is only visible after the transmission has ceased. Ranging is carried out in the normal way using the range controls to position the strobe on the after-glow of the target echo. Range data is automatically relayed to the computer by means of a magstrip transmitter.

MAJOR UNITS

- (a) Pattern 61327 Cabinet Assembly, Design 26, Rectifying, containing:
  - (1) Unit A, Pattern 61329 Rectifier Unit 63AC
  - (2) Unit B, Pattern 61329 Rectifier Unit 63AC
- (b) Pattern 61360 Cabinet Assembly, Design 27, Range Calibrating, containing:
  - (1) Unit C, Pattern 61361, Range Marker Generator Unit
  - (2) Unit D, Pattern 61363, Switch Unit, Design 6, Calibrate Operate
  - (3) Unit E, Pattern 61362, Calibrator Unit, Design 10
  - (4) Unit M, Pattern 61232, Trigger Unit, Design 13, Pulse Equalising
- (c) Pattern 61364 Cabinet Assembly, Design 28, Display, containing:-
  - (1) Unit F, Pattern 61370, Trigger Unit, Design 12
  - (2) Unit G, Pattern 61366, Time Base Unit 72D
  - (3) Unit H, Pattern 61368, Rectifier Unit 63AD
  - (4) Unit J, Pattern 61367, Amplifier, Video and Pulse Brightening
  - (5) Unit K, Pattern 61365, C.R.T. Unit, Design 6
  - (6) Unit L, Pattern 61369, Range Marker Control and Transmission Unit or 5840-AP 173252
  - (7) Control Unit, containing spare Units F and J (not patternised)



DISPLAY OUTFIT JT1

NOTE The Unit letter is marked on the cabinet containing the unit.

PHYSICAL DATA

Height	Width	Depth	Weight
5 ft 4 in	1 ft 6 1/2 in	2 ft 2 in	700 lb

POWER REQUIREMENTS

180 V, 500 Hz or 200 V, 400 Hz, 2.75A for rectifier units etc.  
 220 V d.c. 1A for display heaters.  
 24 V d.c. 3 A for internal relays.  
 115 V 400 Hz for magstrip transmitter.

The following supplies are taken from the Display Outfit JT1.

220 V d.c. to the Crosshead Unit  
 180 V 500 Hz or 200 V 400 Hz to Control Unit Design 95.

The associated Power Supply Outfit is DXF ("T" Class Conversions) and DUL (Porpoise Class).

HEAT DISSIPATION

500 watts.

## RESTRICTED

BR 333(1)

Original

### ELECTRICAL CHARACTERISTICS

- Type of Display : A-scan on 6 inch-long persistence C.R.T.
- Range of Scan : 5000 or 20 000 yards.
- Range Control : Course range in 1000 yard steps by means of a switch. Fine range continuously by means of a thumb-wheel.
- Calibration : A crystal-controlled calibrator produces 1000 yard markers and also sync. pulses at repetition frequencies of 500 and 2500 p.p.s. for triggering the outfit for calibration purposes.
- Inputs : (1) Sync and signal from the Transmitter/Receiver Radar 77A.  
(2) Control for scan brightening.  
(3) Supply to "RANGE CUT" lamp from computer.
- Outputs : (1) Magslip range data.  
(2) Supply to "RANGE CUT" lamp at computer.

### HANDBOOK

BR 940

### ESTABLISHMENT LISTS

E 1071 (JT1), E 735 (DXF), E 524 (DUL).

### INSTALLATION SPECIFICATIONS

B 821 (Types 1000(1)(2), 1001)

B 824 (Type 1002)