DISPLAY OUTFITS JL and JM
SUMMARY OF DATA

PURPOSE
Display outfits JL and JM utilise the Universal Display Unit. The variations of these equipments and their functions are:

(a) Display Outfit JL
- Pitted with Type 960, not modified for Auto-aligning Mark 2 as (1) the Type 960 office displays (11) remote in the R&A, for height estimation purposes and (111) the spare universal display unit.

(b) Display Outfit JM
- Pitted with Type 960 modified for Auto-aligning Mark 2 and performing same functions as Display Outfit JL.

(c) Display Outfit JL1
- Pitted with Types 960/277/380 where Types 960 and 277 are not modified for Auto-aligning Mark 2 in the R&A, for remote display of interrogation and switchable between Type 960 and 277 (1 or 2 in number).

(d) Display Outfit JM1
- Pitted with Types 960/277/380, or with Types 960/277/380 where Types 960 and 277 have been modified for Auto-aligning Mark 2 in the R&A, for the remote display of interrogation and switchable between Types 960 and 380 (1 or 2 in number) or 277 (1 or 2 in number).

MAJOR UNITS

DU1 Patt. 58799 Range Calibrator, Design 4
DU2 Patt. 58000 Amplifier Unit Video, Design 3
DU3 Patt. 58001 Cathode Ray Unit, Design 37
DU4 Patt. 58002 Time Base Unit, Design 37
DU5 Patt. 58003 Generator (Trigger) Unit, Design 2
DU6 Patt. 58004 Rectifier Unit, Design 10
DU7 Patt. 58005 Rectifier Unit, Design 105
DU8 Patt. 58006 Display Unit, Design 23
DU9 Patt. 58007 Time Base A Video Amplifier Unit
DU10 Patt. 58008 Rectifier Unit, Design 106
DU11 Patt. 58009 Switch Unit, Design 24
DU12 Patt. 58097 Switch Unit, Design 32
DU13 Patt. 58010 Control Unit, Design 60
DU14 Patt. 58191 Remote Control Panel, Design 51
DU15 Patt. 581006 Display Outfit JL, Design 37
DU16 Patt. 58006 Display Outfit JM, Design 37
DU17 Patt. 58006 Display Outfit JL, Design 37
DU18 Patt. 58006 Display Outfit JM, Design 37

Unit DU1 to DU5 inclusive are fitted in one of the following:

DU14 Patt. 58191 Display Panel, Design 1 (Display Outfits JL and JM only)
DU16 Patt. 66097/4 Display Panel, Design 3 (Display Outfits JL and JM only)
ANCILLARY EQUIPMENT

Ancillary equipment for these outfits is supplied as part of A.D.C. Outfits FA, R/B and P/D.

POWER REQUIREMENTS

(1) 180 volts, 500 c/s - 5 amps  (4) 220 volts, D.C. - 1 amp  (11) 22 volts, D.C. - 5 amps.

A heavy supply for one hour 10 h.p. type motor is also required.

HEAT DISSIPATION

1 kW

PHYSICAL DATA

The space required is 3'7" x 2'2" x 4'10" high.

Weight of equipment is 750 lb.

BRIEF DESCRIPTION

The Display Unit contains two separate displays:

(a) P.P.I.  (b) A trace or a trace sector selector or B trace sector selector.

(a) A nine inch P.P.I. tube with a long afterglow is used. Ranges available are (1) 50 miles  (11) 100 miles  (111) 220 miles and a motor driven range marker is supplied with a pointer type range counter for reading off accurate ranges. A motor driven bearing cursor is also provided. Calibration pins in the form of concentric circles appear at 1 or 10 mile intervals as required.

(b) The A trace has an upper and a lower trace on a 6" tube which has an afterglow of up to ten seconds. The upper trace presents a static picture of a selected sector as chosen by the bearing cursor so that the echoes on the particular sector (2° to 8°) may be examined in greater detail than on the P.P.I. display. This A trace can be expanded for any 20 mile portion to cover the full width of the tube so that groups of echoes may be examined in more detail. The interrogation is presented on the lower trace, the echoes appearing as downward pulses. Both the Radar picture and the Interrogator picture can be made to display continuously.

(c) Any B trace sector of 90° can be displayed on the same C.R.T. as chosen by the position of the bearing cursor. Expanded range is available.

REMARKS

As the Display Panel, Design 1 or 3 generates 1 kW of heat, forced ventilation of 200 cubic feet of air per minute is necessary.