PURPOSE

Two Interpolator sets fitted in conjunction with types 282/45, Type 283/4 being used to identify aircraft as hostile or friendly and Type 941 for the identification of individual aircraft.

FREQUENCY

- Type 283/4 - A spot frequency between 157 - 161 Hz (usually 171 Hz)
- Type 941 - A spot frequency between 200 - 210 Hz (usually 209 Hz)

WAVELENGTH

- Type 283/4 - 1.75 metres approximately (in 3-band)
- Type 941 - 1.64 metres approximately (in 0-band)

PEAK POWER OUTPUT

1 W

PULSE REPETITION FREQUENCY

50 or 100 pulses per second depending on whether the "Bubbly" modification has been carried out or not.

PULSE LENGTH

10 μs secs.

INTERMEDIATE FREQUENCY

11.2 MHz.

RECEIVER BANDWIDTH

2 kHz.

BEAM WIDTH

80° horizontal at 6 dB (all variations of aerial)

POWER REQUIREMENTS AND CONSUMPTION

230 Volts 50 c/s = 600 watts
180 Volts 50 c/s = 100 watts
22 Volts D.C. = 3 amps

This covers requirements for both Types 283/4 and their aerial units.

The 230 volts 50 c/s and 22 volts D.C. supply is taken from the Type 281A Distribution Board but the source of the 180 volts 50 c/s supply depends on the Radar Gannetry and Tactical Communications Arrangements for the ship concerned.

HEAT DISSIPATION

500 watts (approximately)

MAJOR UNITS

Patt. 562/6 Framework, Steel, in which the following units are mounted:

- Type 283/4
  - Patt. 562/6 Transmitter 7M
  - Patt. 1028.788 Monitor Unit Type 50
  - Patt. 562/51 Suppression and Control Unit

- Type 941
  - Patt. 562/41 Transmitter 7M
  - Patt. 1028.788 Monitor Unit Type 50
  - Patt. 562/65 Suppression and Control Unit
  - Patt. 562/45 Suppression and Control Unit
  - Patt. 562/45 Riser Unit 7M

Test Equipment

- A.M. Ref. 102/90 Monitor Type 25
- Patt. 56250 Waveform Generator
- A.M. Ref. 102/97 Waveform Type 1310
- Patt. 562/60 Output Tester 885 Comparator
- Patt. 562/55 Output Tester 885 Blade Lead
- Patt. 562/84 Performance Meter 4

PHYSICAL DATA

- Weight of office equipment = 375 lb.
- Weight of aerial arrays = 170 lb.
- Dimensions of Rack Framework = 5' 8" high x 2' 2" wide x 1' 8" deep.
AERIAL OUTFITS

AOF - 32X (only when 32X is fitted in addition to Type 941),

AOD - 941 (1 only when Type 941 is fitted in conjunction with Type 201 RX),

AOC - 941 (1 only when Type 941 is fitted in conjunction with Type 201/B/201P),

AOG - 32X (1 only when Type 941 is not fitted in addition to Type 32X),

Aerial OUTFITS AOC and AOG rotate with the main Type 201/B/201Q aerial, while Aerial OUTFIT AOF is controlled locally in the Type 201/B/201Q receiver office by Control Unit Part B, 56960 or remotely from the Sector Selector Pkt. 2203B, part of Display OUTFIT JSZ in the I.D.R.

BRIEF DESCRIPTION

Types 32X/941 comprise two separate interrogator sets fitted in a common framework and used with all variations of Type 201. Type 201Q provides a simple display of I.F.P. responses in the Type 201/B/201Q receiver office (and in the I.D.R. when Display OUTFIT JSZ is fitted), while Type 941 provides plan display of 2 head responses on the various UK and JK display OUTFITs fitted. Type 941 aerial is mounted above the Type 201/B/201Q aerial and rotates with it. Type 32X/941 is fitted on a bracket on the mast and can be controlled from a unit mounted in the Type 201/B/201Q receiver office (or from Display OUTFIT JSZ) in the I.D.R. when fitted.

HANDBOOKS

B.R.1553 (Type 201Q) B.R.1503 (Type 941).

ESTABLISHMENT LISTS

E.531 (Types 32X, 941, Aerial OUTFITS AOC and AOF).

E.536 (Aerial OUTFIT AOG).

INSTALLATION SPECIFICATION

B.289/81.