

TYPES 954(1) AND 954(2)

SUMMARY OF DATA

PURPOSE

I.F.F. Mark 10 Transponder for replying to I.F.F. Mark 10 Interrogators.

FREQUENCY

1030 Mc/s Reception
1090 Mc/s Transmission

POWER OUTPUT

300W (peak) approximately.

PULSE REPETITION FREQUENCY

Up to 4000 pulses per second (depending on interrogator).

PULSE LENGTH

1 microsecond approximately.

INTERMEDIATE FREQUENCY

59.5 Mc/s.

RECEIVER BANDWIDTH

8 Mc/s to 11 Mc/s at 6 dB down.

BEAM WIDTH

Omnidirectional

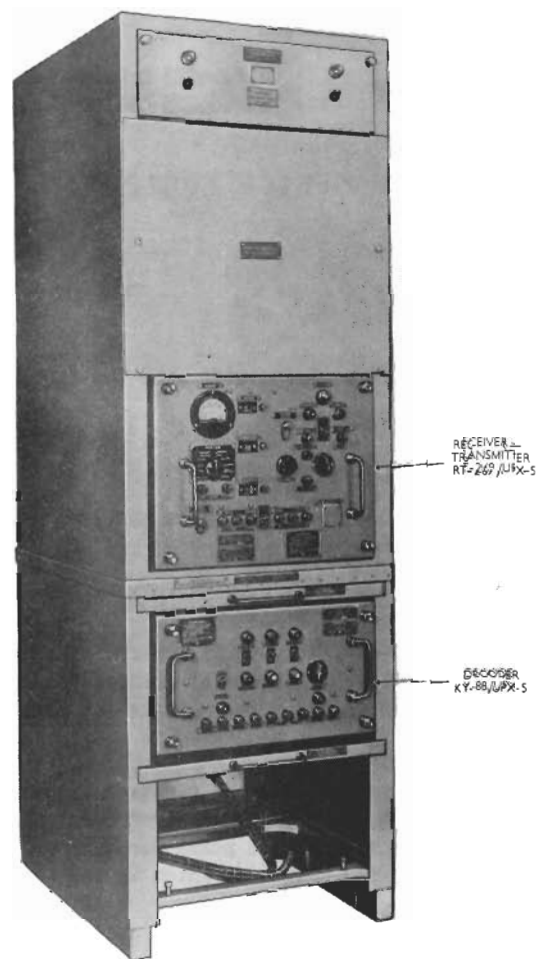
POWER REQUIREMENTS

115V 50/60 c/s single phase 750 watts)
115/220/230V D.C. or A.C. 350 watts)

These figures allow for fitting of future equipment.

HEAT DISSIPATION IN OFFICE

750W approximately.



TYPE 954(1) CABINETS
(GENERAL VIEW)

MAJOR UNITS

(a) American Items

- (i) Receiver-Transmitter RT-269/UPX-5 (MSA))
- (ii) Decoder KY-88/UPX-5 (MSA)) Part of AN/UPX-5 (MSA)
- (iii) Radar Set Control C-1076/UPX-5 (MSA))

- (iv) Antenna AS-177/UPX (MSA). Part of Aerial Outfit AMA
- (v) Test Set AN/UPM-6B (MSA) (Type 954(2) only)

(b) British Items

- (i) A.P.64223 Cabinet Design 131)
- (ii) A.P.64225 Cabinet Design 133) Part of Accessory Outfit FFC

WEIGHT OF OFFICE EQUIPMENT

600 lb.

DIMENSIONS

6 ft high x 22 in. wide x 28 in. deep.

ASSOCIATED AERIAL OUTFIT

Aerial Outfit AMA (Antenna AS-177/UPX (MSA))

BRIEF DESCRIPTION

Types 954(1) and 954(2) are the shipborne transponders for replying to I.F.F. Mark 10 interrogators. Both sets employ the same items of transponder equipment, but Type 954(2) includes Test Set AN/UPM-6B (MSA) in addition and is fitted in cases where it is not possible to utilise the test set provided with Types 944(1) or 944(2). In Type 954(1) the test set space is available for additional units which may be fitted at a later date.

The interrogations are received as pulse pairs on a frequency of 1030 Mc/s. These interrogations are converted to video signals in the Receiver-Transmitter RT-269/UPX-5 from whence they are passed to the Decoder KY-88/UPX-5 which generates a single pulse for each correct interrogation. These pulses are fed to the modulator of the transmitter, the output of which is fed to the antenna and radiated on 1090 Mc/s as replies to the interrogations.

REMARKS

The main items of transponder equipment, although made in the United Kingdom, are of American design and have been supplied under the Mutual Defence Aid Programme. The cabinets for housing the office equipment have been designed in the United Kingdom.

HANDBOOK

B.R.2134

E LIST

E.1128

INSTALLATION SPECIFICATION

B832 Type 954(1) and (2) and Aerial Outfit AMA.