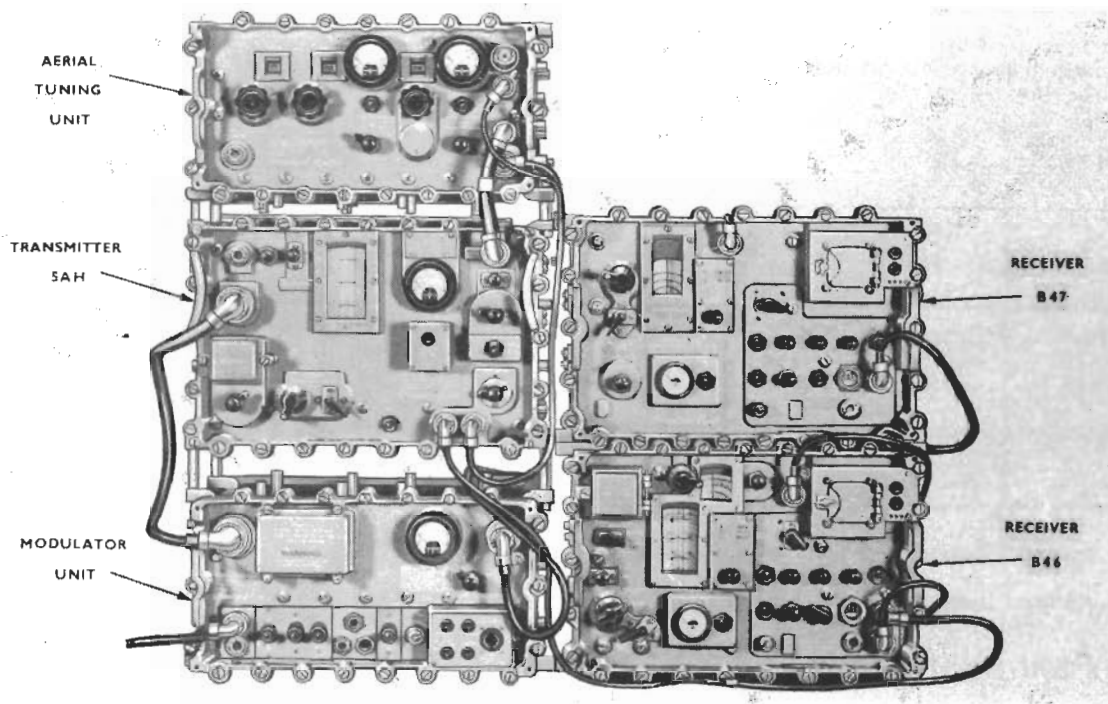


SUMMARY OF DATA



TYPE 612E - GENERAL VIEW OF EQUIPMENT

PURPOSE

A general purpose low power HF AM transmitter, HF receiver and a M, L, and VLF receiver, the equipment being designed as a number of transportable watertight units.

- Type 612E - emergency equipment in destroyers and replaces Types TCS and 607/8
- Type 612EF/F - emergency transmitter in Bridge wireless Office of cruisers and 2nd Wireless Office of Flotilla Leanders and replaces Type 60EQR
- Type 612ET - temporary shore station used by landing parties etc. and replaces Type 52ERT. The equipment can be moved and erected by two men

TYPE OF TRANSMISSION AND RECEPTION

CW, MCW or Voice

FREQUENCY RANGE

- Transmitter 5AH - 1.5 to 13.0 MHz
- Receiver B46 - 1.4 to 15.0 MHz
- Receiver B47 - 40.0 to 500 kHz and 15.0 to 27.0 kHz

BRIEF DESCRIPTION

Transmitter 5AH, Patt. 59517

- Frequency - 1.5 to 13.0 MHz
- Frequency Control - Master Oscillator self excited or crystal controlled
- Output - 12 to 20 watts on Voice or MVW or 20 to 40 watts on CW, into a 100 ohm unbalanced line or Aerial Tuning Unit
- Keying - Up to 20 words per minute with 'break-in' facilities

Anode Modulation is employed and unit incorporates a 100 kHz Crystal Calibrator

Modulator for transmitter 5AH D.C. Supply, Patt 65169

Comprises the modulator circuits, control circuits and the D.C. power supply unit for itself and Transmitter 5AH. The MCW note is 800 Hz and the Audio Frequency response for voice is 400 to 3000 Hz.

Aerial Tuning Unit, Patt. 65168

Comprises a combination of inductors and capacitors, the circuit being tunable over a wide range to provide maximum transference of power from the Transmitter 5AH to the aerial. This unit also contains a Dummy Load for the transmitter.

MAJOR UNITS

Patt. No.	DESCRIPTION	PHYSICAL DATA				ASSOCIATED WITH
		Height	Width	Depth	Weight	
59517	Transmitter 5AH	17 in	22½ in	15 in	75 lb) Types 612E/F/EF/ET
65169	Modulator Unit	15½ in	22½ in	15 in	77 lb	
65168	Aerial Tuning Unit	15½ in	22½ in	15 in	59 lb	
58674	Receiver B46	17 in	20½ in	13½ in	60 lb	Types 612E/EF/ET
58675	Receiver B47	17 in	20½ in	13½ in	64 lb	Types 612E/ET

All physical data is inclusive of the tubular steel carrying crates.

NOTE: For further information on Receivers B46 and B47 see data sheet on Receiver Outfits CAJ, etc.

ANCILLARY EQUIPMENT

Patt. No.	DESCRIPTION	REMARKS
-	Battery Outfit B8n	Normal office battery supply for Type 612EF Type 612EF/F only
66199	Supply Unit A.C. for Transmitter 5AH	
66126	Aerial Change-over Switch	Fitted with all installations
-	Battery Outfit B8c	Type 612E/EF/ET
-	Aerial Outfit AWH	Not supplied to Coastal Craft
58408	Remote Control Unit	Type 612ET only

POWER REQUIREMENTS AND CONSUMPTION

By using appropriate power units Transmitter 5AH and Receivers B46 and B47 can be operated from 24 V D.C., 230 V 50 Hz with the following power consumptions :-

Transmitter 5AH - 250 watts; Receiver B46 - 42 watts; Receiver B47 - 26 watts.

CONTROL CIRCUITS

Ashore - Type 612ET can be operated in 'Local Control' or operated remotely up to a distance of 800 yards.

Ship - Types 612E/F/EF can be adapted for use with the Wireless Control Outfits KCh, KDA and KHA series.

HEAT DISSIPATION

- 250 watts

AERIAL SYSTEM

- Transmitter 5AH - With the Aerial Tuning Unit any wire aerial 15 - 120 feet long or whip Aerial Outfit AWG.
- Receiver B46 - Any wire aerial 40 ft long of which at least half must be vertical or whip Aerial Outfit AWG.
- Receiver B47 - Any wire aerial 30-50 ft long of which at least half must be vertical or whip Aerial Outfit AWG.

HANDBOOK ESTABLISHMENT LIST INSTALLATION SPECIFICATION

W 1616(1)(2)
E981 (Type 612ET); E965 (Types 612E/F/EF)