

WIRELESS SET No. 46 (ZA 11622)

DATA SUMMARY

PURPOSE

Man-pack transmitter-receiver, providing R/T and M.C.W. communication. Primarily used during beach operations, but alternatively can be used as a fixed station.

DESCRIPTION

Receiver is four-valve superhet. comprising triode pentode frequency changer, two I.F. stages, diode detector and A.V.C., and output reflexed into 2nd I.F. Sender has one R.F. valve, anode-modulated. Modulator valve driven by triode throat microphone amplifier, which can also act as M.C.W. oscillator. Both local and master oscillators are crystal-controlled. Four frequency bands selected by plug-in coils. Three spot frequencies in each band selected by switching crystals. Set is housed in waterproof steel case; batteries in separate haversack; waterproof haversack provided if necessary.

PHYSICAL DATA

	Set in carrier	Complete station as carried with one battery
Weight :	11 lb.	24 lb.
Length :	12½ in.	
Width :	7½ in.	
Height :	4½ in.	

FREQUENCY

Three spot frequencies in one of the following bands :—

Coverage :	3.4—4.3 Mc/s	6.4—7.6 Mc/s
	5.0—6.0 Mc/s	7.9—9.1 Mc/s
Internal :	I.F. 1,550 kc/s	

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PERFORMANCE

Range : approx. 10 miles in day time in flat country.
Sender output : 1.5 W.
Receiver sensitivity : 8 µV for 0.1 mW with signal-to-noise ratio of 10 db.
Receiver selectivity : 40 db. attenuation at ± 38 kc/s

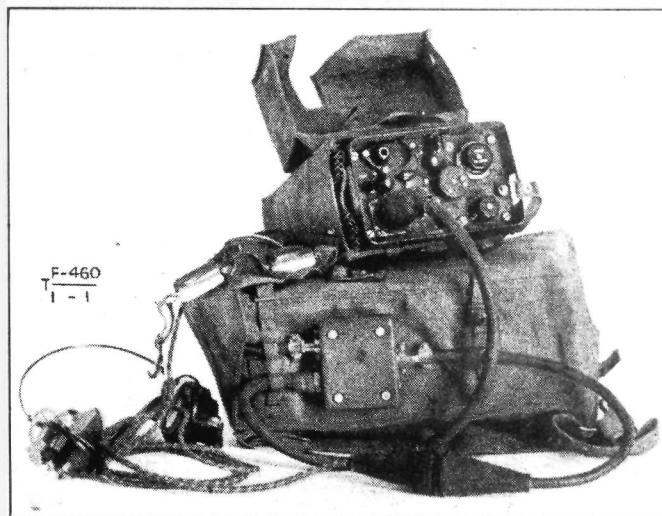


Fig. 1—General view of complete set

Distribution - Class 870. Code No. 4

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POWER REQUIREMENTS AND CONSUMPTION

Battery, dry, 162/3V, No. 1 or No. 2.

Service	H.T.	L.T.
Send R/T	28 mA	550 mA
.. M.C.W.	37 mA	550 mA
Receive R/T	10 mA	350 mA

AERIAL SYSTEM

- (a) 9 ft. rod (mobile).
- (b) 16 ft. antennae rods F (static).

VALVES

Circuit reference	Type	Function
V1A	ARTP 2	Frequency changer
V2A	ARP 12	First I.F. amplifier
V2B	ARP 12	Second I.F. and reflexed A.F. amplifier
V3A	AR 8	Double-diode for detector and A.V.C. triode modulation amplifier and M.C.W. oscillator
V4A	ATP 4	Sender oscillator
V5A	ARP 37	Push-pull modulator

END