Vol. 1 AMENDMENT No.1

After the publication of *Wireless for the Warrior* Volume 1 a number of minor typing errors and incorrect data have been noted. Corrections and additional information are combined in this ***Volume 1 Amendment No. 1***. If printed on A4 paper please cut away circa 6mm (¼ inch) from the bottom and the right hand side of the sheet. The prepared sheets will then fit snugly between the last page and cover of the book.

Contents

- Add 'Wireless Set No. 34' between Wireless Set No. 33 and No. 36

WIRELESS SET No. 1

- Page W.S.1 -1: Data Summary, *Valves*: Change …ARS4… to …**ARS6**…

WIRELESS SET No. 4

- Page W.S.4 -1: second column, second line: Change …33-ft square loop… to …**3**-ft square loop…

WIRELESS SET No. 8

- Page W.S.8 - 1: Data Summary, last line: Change ..AF amp. ARP12... to …AF Amp. **AR8**…
- Replace page W.S.8 - 4: Circuit diagram of receiver section Wireless Set No. 8

WIRELESS SET No. 12 HP

- Page W.S.12 - 1: Data Summary, *Modulator Unit*: Change …2x 6C5GT... to …**6C5G**…

WIRELESS SET No. 14

- Page W.S.14 -1: Data Summary, *Valves*:
  - Change …ARP7… to …**ATP7**…
  - Change …2x ARP12… to …ARP12…

WIRELESS SET No. 15 (E10)

- Page W.S.15 -1: Data Summary, *Size*: Change …length: 11ft, width 25ft… to …length **25**ft, width **11**ft…

WIRELESS SET No. 27

- Add page W.S.27 - 3: W/T Set Type 67 – Operating Instructions (Royal Navy version of Wireless Set No. 27)

WIRELESS SET No. 33

- Page W.S.33 - 1: Data Summary, *Size (Inches) and Weight*:
  - Change…Transmitter 23 16 25 175lb… to …Transmitter 23 **25 16** 175lb…
  - Change…Power Supply Unit 25 16 15 170lb… to … Power Supply Unit **15 25 16** 170lb…

WIRELESS SET No. 34

- Add page W.S.34 - 1 between page W.S.33 – 16 and page WS 36 -1

WIRELESS SET No. 78

- Page W.S.78 – 1: Data Summary:
  - Change in *Frequency Coverage*: …Frequency range 2.960-9.515MHz… to …Frequency range 2.960-9.**575**MHz…
  - Move in *Valves*: Mixer 1R5 …**1R5**… under *type*

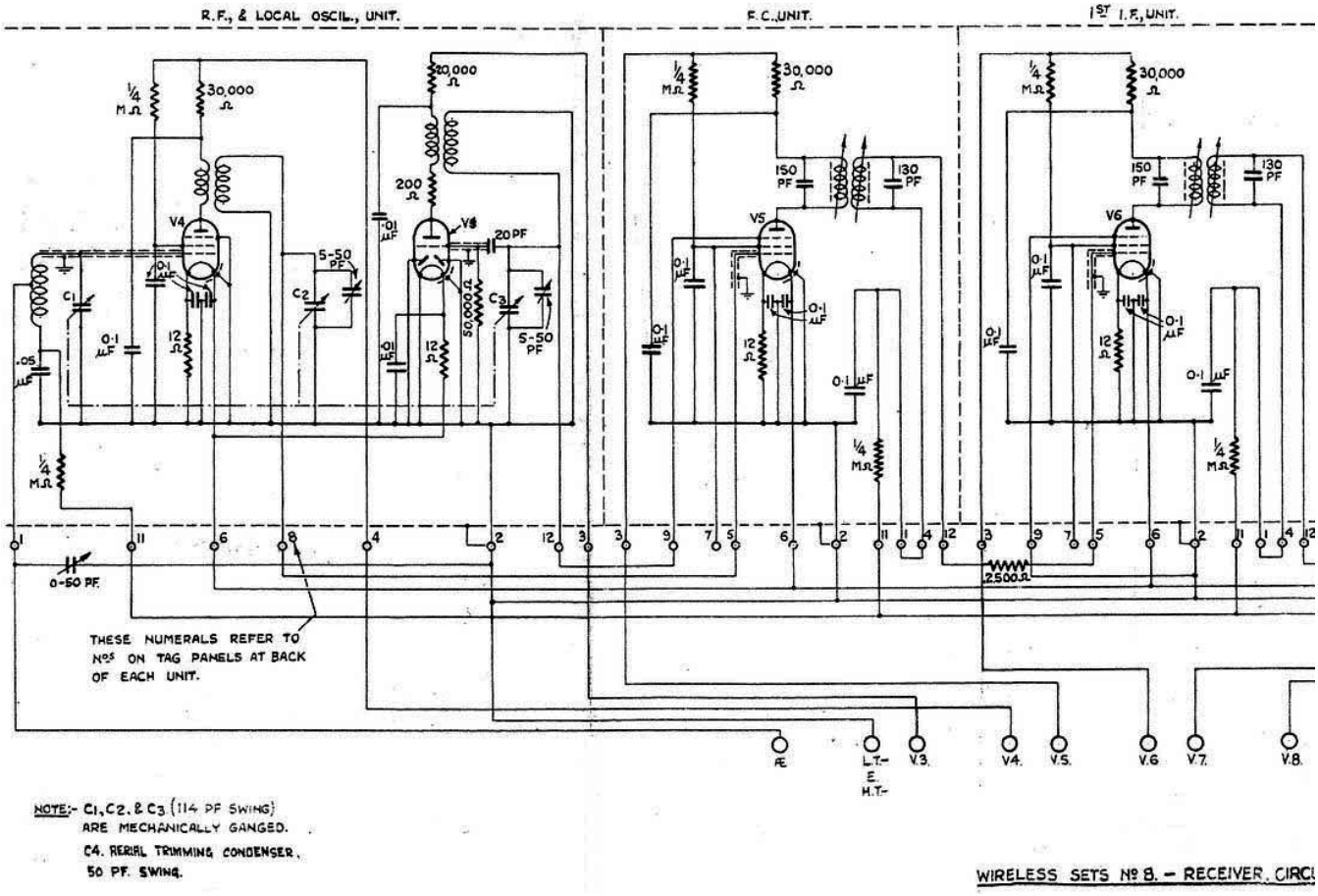
Appendix 3 'Accessories'

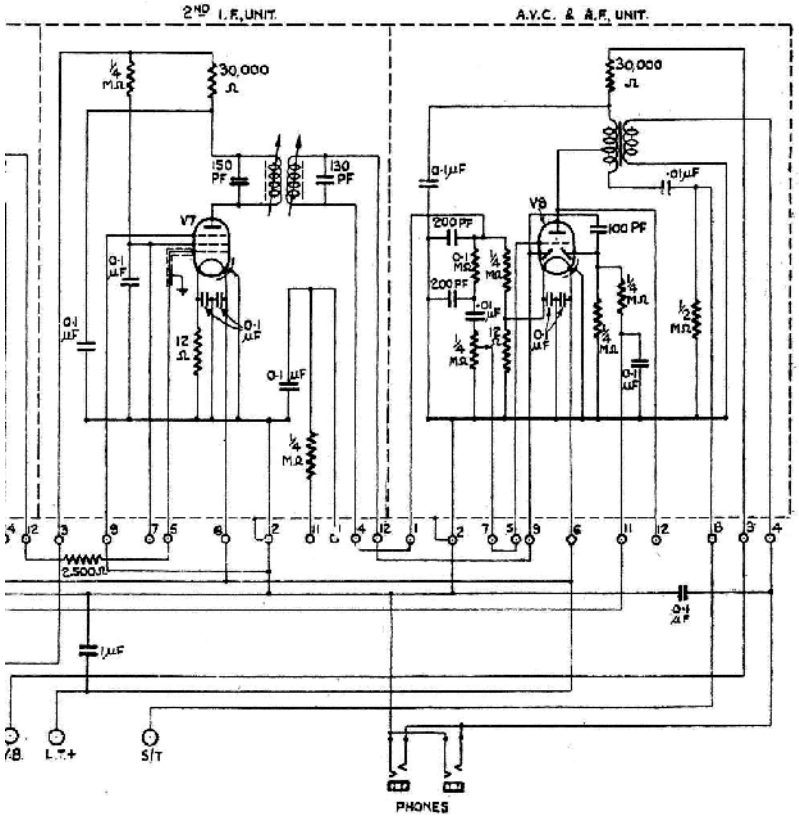
Appendix 3 'Accessories' of Volume 1 was amended along with numerous additions in the similarly named Appendix 3 of Volume 2. If Volume 2 is available we recommend that you use its version of Appendix 3.

Date of issue: February 2010

Circuit diagram WS No. 8 receiver

Note the unit construction of the various stages. The frequency changer unit and two IF stage units are identical.





W/T Set Type 67 Operating Instructions and circuit diagram

W/T Set Type 67 was the Royal Navy version of the Army Wireless Set No. 27. Although the circuit diagram printed in this Operating Instructions differ slightly to the diagram on page W.S.27 - 2 it is believed that issues to both Arms were nearly identical

W/T. SET. TYPE 67 - OPERATING INSTRUCTIONS.

PRELIMINARY.

Before the set can be used the 1½ volt L.T. Battery must be filled with water. This should be done eight hours or more before the set is required for use.

The transmitter operates on three spot frequencies :—(A) 22.5 Mc/s (B) 23.5 Mc/s (C) 24.5 Mc/s.

The receiver tunes continuously from 22—25 Mc/s with three calibrated frequencies :—22.5 Mc/s, 23.5 Mc/s, and 24.5 Mc/s.

OPERATION.

Normally the set should be slung from the body for operation in such a manner that the flap of the haversack opens away from the operator.

Aerial. The aerial is stowed in a pocket which also contains the handset, and should be connected to the aerial terminal. For all-round maximum range and signal strength the aerial should be vertical, the free end being thrown over or secured to some suitable object. If this is not possible the aerial can be laid out in a straight line on the ground, pointing in the direction to be worked.

Tuning. Set the transmit-receive switch to the correct position and the transmitter tuning control to the desired frequency. Switch on the set, and a loud hiss will be audible in the telephone until the signal is tuned in. A strong signal will reduce the noise to a very low level. Correct tuning point will be at a minimum background noise from receiver.

Communication. Talk well into the microphone in a fairly loud voice.

SPARES AND BATTERIES.

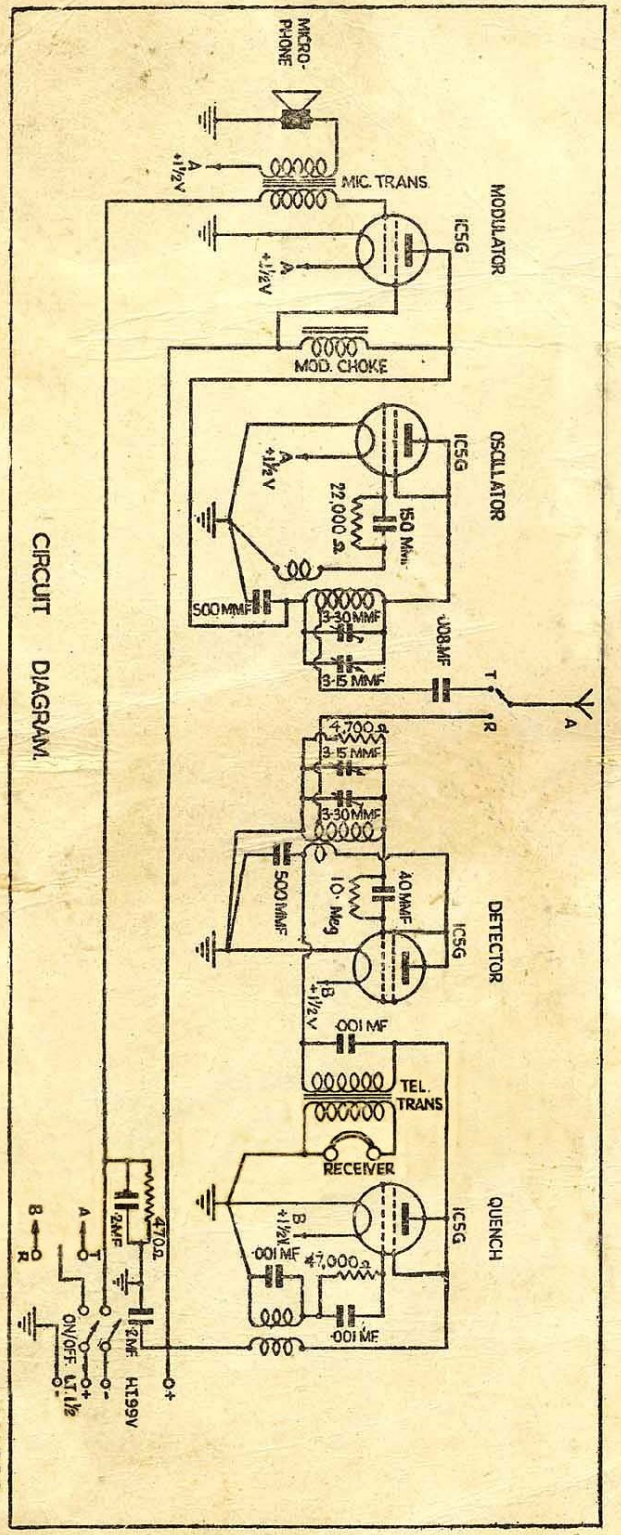
Two spare valves are stowed in the battery holder.

To change the L.T. Battery unscrew the four terminal nuts which secure the connector bars, these can then be turned aside and the battery removed.

To change the H.T. Battery or Valves withdraw the set from the haversack.

To change a valve remove the H.T. Battery carrying cover from the chassis by unscrewing the two milled nuts.

NOTE :—ALWAYS SWITCH OFF SET WHEN NOT IN USE IN ORDER TO CONSERVE BATTERY LIFE.



Wireless Set No. 34

In the early and mid World War 2 period a requirement was raised for improved short range radio intercommunication facilities between Armoured Command Vehicles (ACV) in large HQs when either stationary or on the move. Wireless Set No. 14, initially developed for this purpose and issued in the early days of the war, was not considered suitable as being too complicated and bulky. This need was only partially filled by the "B" set of Wireless Set No. 19, due to the limited range of this set.
Development work was therefore started on Wireless Set No. 34 which was expected to give adequate facilities up to a range of 3 miles or more on the move.
One of the designs consisted of four complete VHF FM R/T transceivers built into a single box similar to that of the No. 19 Set. Its weight was about 60lbs excluding supply unit. Power was derived from 12V DC or AC mains. There were four channels: 45.1MHz, 48.3MHz, 51.6MHz and 54.9MHz. The frequency deviation was ± 40kHz and the range 3 miles when working on the move. Wireless Set No.34 was intended to be used in conjunction with a Wireless Switchboard allowing the connection of the four No. 34 Set channels (and other sets, for example No. 12 HP Sets) to a maximum of four users.

However, during its design severe design difficulties were encountered due to interference from high power sets such as Wireless Senders Nos. 12 HP, 33, SCR299A, etc. These difficulties appeared to be insuperable and no further work was done on the development of this set of which only a few prototype test models were made.
In the Middle East a local modification of Wireless Set No. 18 was produced which enabled it to operate a small loud-speaker at adequate volume. An amplifier was fitted in the battery compartment of the set, the whole operating off the normal vehicle battery and providing a suitable improvised solution to the inter ACV communication problem.

