



Front panel and top view of Mk.18 transmitter-receiver showing transmit (TMit./receive (REC.) toggle switch, transmitter RF power amplifier tuning control (left), receiver reaction (REACT.) control (centre) and receiver tuning control (right). Apertures on top of the chassis gave access to the transmitter doubler setting, and RF power amplifier tuning lamp.

Mk.18

Country of origin: England

This Supplement Chapter is a follow up of the Mk.18 section in the 'Great Britain' chapter of WftW Volume 4.

DATA SUMMARY

Organisation: MI6 SIS.

Design/Manufacturer: SIS Section VIII, Whaddon Hall/Little Horwood workshops.

Year of Introduction: Probably 1943/early 1944.

Purpose: Agents, Resistance groups.

Receiver:

Circuit Features: RF, Det, AF.

Frequency Coverage: 30-37MHz (believed).

AF Output: Headphones.

Valves: 9001 (2x), 9002

Transmitter:

Circuit Features: Osc/Doubler, RF PA, Modulator (FM).

Frequency Coverage: Preset to a frequency in the range 30-37MHz.

Valves: 6V6 (2x), 6L6.

Aerial: Probably vertically polarised wire dipole.

Power Supply: Separate power supply unit providing LT and HT.

Size (cm): height 6, length 15.5, width 15.3.

Weight (kg): 1.5 (transmitter-receiver only).

Accessories: Microphone, headphones, aerial and power supply unit.

REMARKS

The Mk.18 was a simplex transmitter-receiver for voice (R/T) only. It was probably a later version of the 'Ascension' VHF FM communication system ground station allowing agents to have direct voice contact with an operator in an aircraft flying at high altitudes, equipped with complementary equipment and probably a wire recorder for later playback of the conversation. The transmitter was pre-set on a fixed frequency; the receiver was tunable over a full frequency range of 30-37MHz. The aerial (possibly a vertical wire dipole) was connected via two 4mm sockets. The RF power amplifier was tuned from the front panel on maximum brilliance of a small bulb which was located behind an opening on top of the chassis. See also the Mk.17 in Chapter 13 of the WftW Supplements.

Engraved on the right hand top corner of the chassis was 'MK.18/112', believed to be the type and serial number.

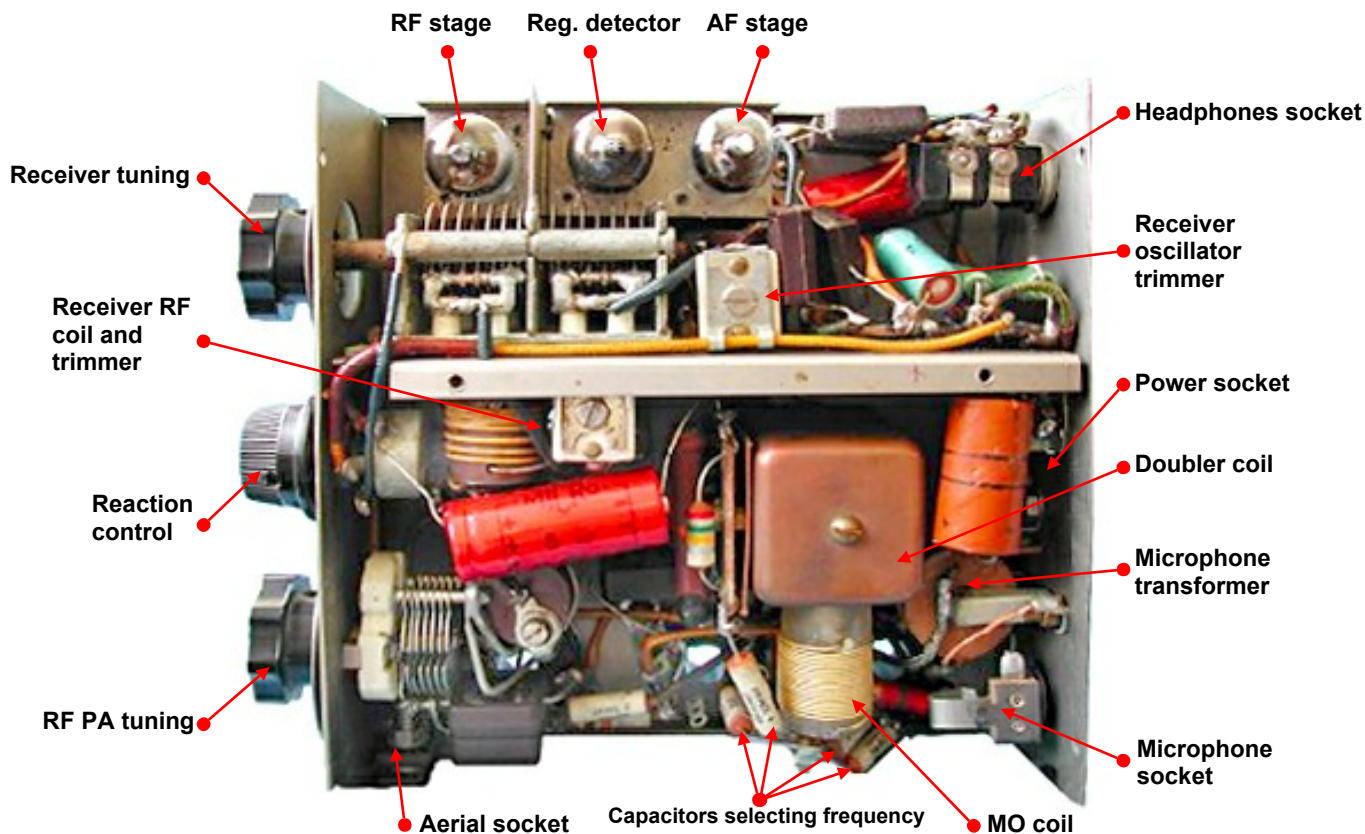


Associated Publications:

- I am indebted to Eric Pierret, France, for permission to use his photographs and providing additional information.
- 'Information held on Allied Clandestine Equipment', a summary by Pat Hawker, G3VA, Mar. 2000. This document is incorporated in 'The Secret Wireless War', (Appendix 6: Agents' Sets) by G. Pidgeon, ISBN 1-84375-252-2, UPSO, 2003.
- 'Information held on Allied Clandestine Equipment', a summary by Pat Hawker, G3VA, amended April 2004.
- Wireless for the Warrior, Volume 4, Clandestine Radio, ISBN 0952063-36-0, Sept. 2004.



Rear view of Mk.18 transmitter-receiver chassis showing telephone and microphone sockets, a 4-pt Jones socket for connection the power supply unit, and a 4mm earth socket.



Bottom view of Mk.18 chassis with cover plate removed. The top section comprised a three valve receiver and, separated by a metal partition, the lower section the transmitter and modulator. Note that the receiver RF coil and reaction control are located in the transmitter section. Although not confirmed by any surviving technical documentation, it is believed (according to the number of turns on the oscillator coil) that that the transmitter oscillator operated on half of the actual frequency. The MO frequency was fixed, determined by a number of small capacitors.



Left and right hand side views of Mk.18 showing receiver section with three miniature type valves (photograph above) and transmitter (photograph below). Note the 4mm socket in the left hand corner of the bottom picture for connecting the aerial.

