



Midget receiver #7A in a 'Havana Bouquet' cigar box.

DATA SUMMARY (#7A)

Design/construction: Unknown Belgian radio amateur.
Year of Introduction: Unknown.
Purpose: Clandestine listening to Allied broadcast stations.
Circuit features: Regenerative TRF.
Frequency coverage: Medium wave.
Valve: Dario 'Bigrille' (R43M).
Power Supply: 4½V LT battery and 2x 4½V HT battery.
Size (cm): Height 7½, Length 18, Width 14.
Weight: 666g.

Clandestine Midget Receivers #7

Cigar box enclosure

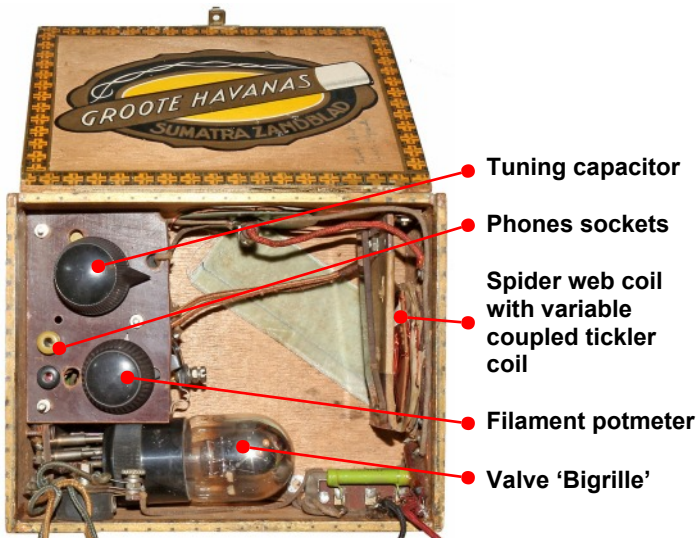
Country of origin: Holland/Belgium

REMARKS

The two clandestine midget receivers depicted in this chapter had in common that each receiver was built into an empty wooden cigar box. Midget receiver #7A fitted in a 'Havana Bouquet' box, described on this page, was found in Belgium. It could tune the medium wave band, based on a commercial spider web coil assembly with a variable coupled tickler coil (acting as regeneration control). The valve was, at the time, an already dated French Dario 'Bigrille', known as R34M, originally intended as mixer-oscillator in early superheterodyne receivers. Due to fragile wiring it was impossible to trace its circuit diagram, particularly to find out whether the valve was possibly connected in space charge configuration. According to a yellowed note, found in the bottom of the box, the radio operated on three 4½V flashlight batteries: one for the filament and two in series for HT. The date of construction may be speculated to be mid WW2 or slightly earlier as dry batteries were scarce, but still available. German jamming on Allied medium wave stations was not yet extensive.



Midget receiver #7A with loosely coupled tickler coil.



References:

Collection Evers. Photographs and information courtesy Ronald Evers, Herveld, Holland.

Clandestine Midget Receiver #7B

REMARKS

The 'Monaco' cigar box receiver was powered from AC mains and received on medium and long wave. The circuit and construction was based on an UCH5 valve with triode regenerative detector, and hexode AF amplifier.

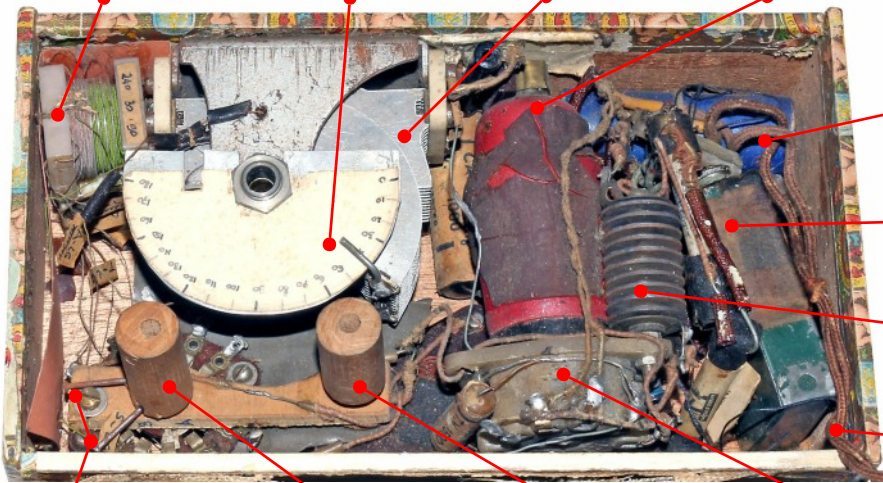
20V filament voltage at 100mA was obtained via a series capacitor C3 directly from the AC mains, similar to other midget receivers e.g. #2 in Chapter 95, and #3B in Chapter 151. HT was also derived directly from 220V mains via a small selenium rectifier. Not yet clear was the use of an UCH5 valve (with 'P' type base), which was only officially introduced in 1946/7, based on the UCH4 which had an octal base and first produced in 1940.

The apparent lack of radio components shows particularly in the use of wooden rolls substituting the range switch and regeneration control knobs.



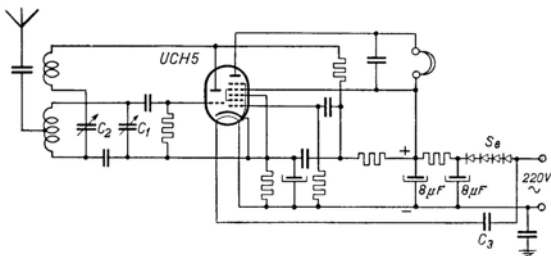
Midget receiver #7B built into a Mignot & de Block 'Monaco' cigar box.

MW/LW coil on form Tuning pointer Tuning capacitor UCH 5 valve



HT capacitor
Filament series capacitor C3
Selenium HT rectifier
Mains lead

Range switch limit stops Range Switch Regeneration control 'P' type valve socket



Circuit diagram of a receiver with only one band, but basically similar to midget receiver #7B in this chapter.

DATA SUMMARY (#7B)

Design/construction: Unknown radio amateur.
Year of Introduction: Not known.
Purpose: Clandestine listening to Allied broadcast stations.
Circuit features: Regenerative TRF and AF amplifier.
Frequency coverage: Medium and Long Wave.
Valve: UCH5. This valve had a 100mA series fed filament at nominal 20V AC/DC.
Power Supply: 220V AC mains.
Size (cm): Height 5½, length 19½, width 11.
Weight: 658g.