



OK1AU  
Agents transmitter  
Country of origin: Czechoslovakia

REMARKS

A very easy to conceal miniature shortwave transmitter for intelligence communication was developed by Ing. Jan Budík of the Czech Ministry of Defence in 1938/39. It became later known as the 'OK1AU' transmitter, taken from his pre-war radio amateur call sign. The transmitter was comprised of a tin plated box of 8x8x5cm with an external valve and crystal, both plugged in at the rear side the transmitter when required for use. A miniature Morse key was incorporated on the top panel along with a strip of four banana type sockets leading to aerial taps on the anode tuning coil. Tuning for maximum RF output was accomplished by the brilliance of an external small bulb assembly connected in series with the aerial lead.

The design and circuit diagram had elements of the German Abwehr 'Adapter' transmitter, though it had not the feature of a direct plug-in to the AF output valve of a broadcast receiver. The OK1AU transmitter design later formed the basis of the NK-1 transmitter (see Chapter 289), believed to be designed by Antonín Šimandl of the Czech Army in exile at the Czechoslovak Central Radio Station near Bedford.

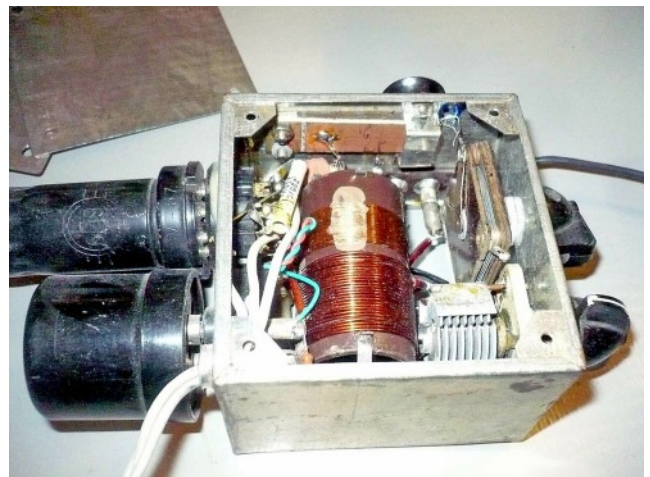
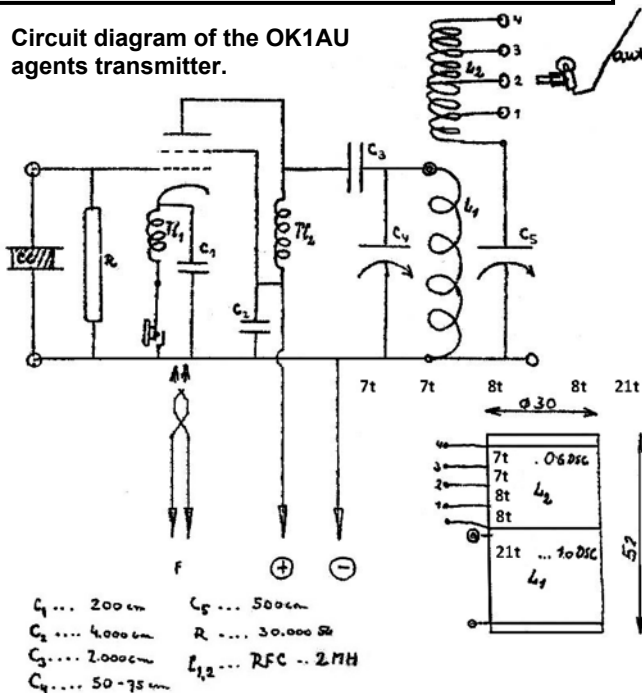
DATA SUMMARY

**Organisation:** Intelligence department of the Czech Ministry of Defence.  
**Design/Manufacturer:** Ing. Jan Budík, OK1AU.  
**Year of Introduction:** 1939.  
**Purpose:** Agents transmitter.  
**Circuit features:** Crystal oscillator/RF power amplifier. CW only. About 4-6W RF output.  
**Frequency coverage:** 4-6MHz. (An estimate!)  
**Valves:** 6V6 or similar.  
**Aerial:** Wire and counterpoise.  
**Power Supply:** A separate (AC Mains) power source.  
**Dimensions (mm):** Height 50, length 80, width 80.



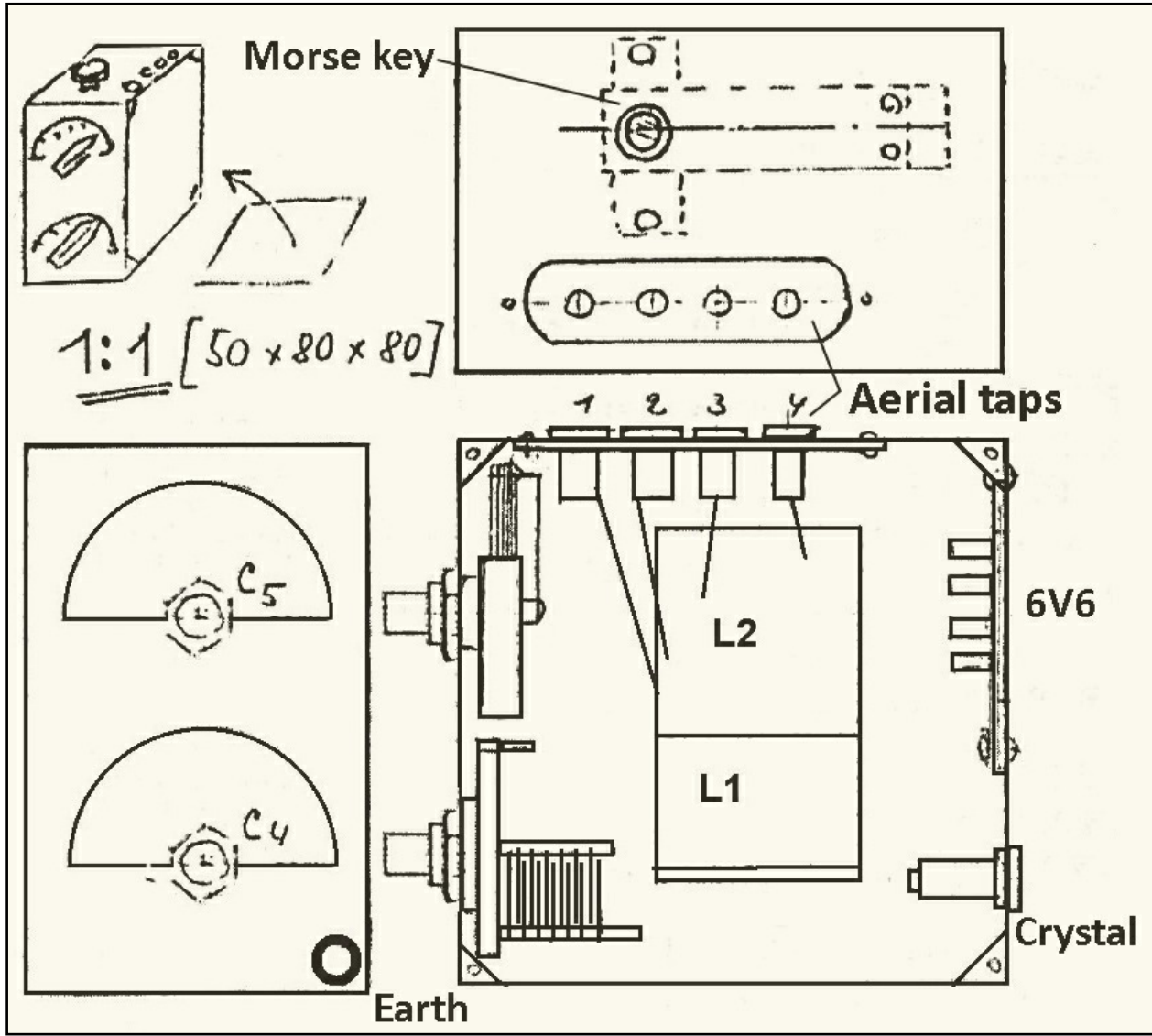
Side- and internal view of the OK1AU replica (above and below).

Circuit diagram of the OK1AU agents transmitter.



References:

- All information, including original circuit diagram and drawings for a replica was provided by Miro Hornik, OM3CU who also kindly took the photographs from his replica.
- Předváleční amatéři vysílači v Československu, 'Ing. Jan Budík', Laco OK1AD, Ivo OK1SI and Honza OK1XU, Praktická Elektronika 12-2018.
- Muž a radiostanice tajné války, Vit Hanek, OK1HR, Elli print, 2002, ISBN 80-239-0322-5.



Detail view of OK1AU agents transmitter replica built-in Morse key, ingeniously constructed by Miro OM3CU using a small strip of PCB.

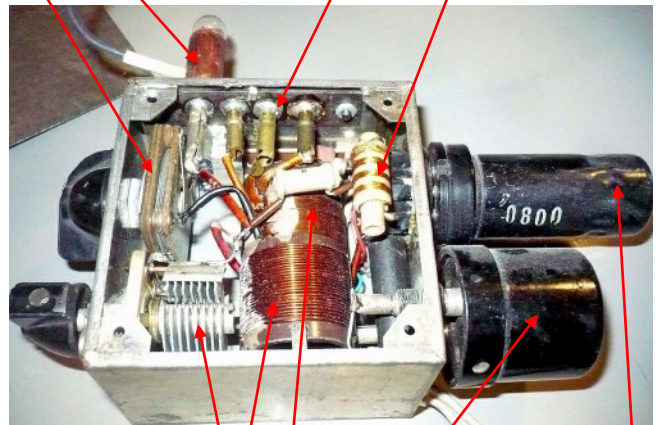


**Building an OK1AU transmitter replica.**

With the original circuit diagram and construction drawings, it should (apart from a tin plated steel enclosure) not be very difficult to obtain the period parts for constructing a replica OK1AU transmitter.

Construction details of the 1939 OK1AU agents transmitter drawn at real size.

- Aerial tuning capacitor C5
- Aerial tap sockets
- Aerial tuning lamp
- RF choke L2



- Tuning capacitor C4
- Tuning coil L1
- Aerial coil L2
- Crystal
- Transmitter valve 6V6

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