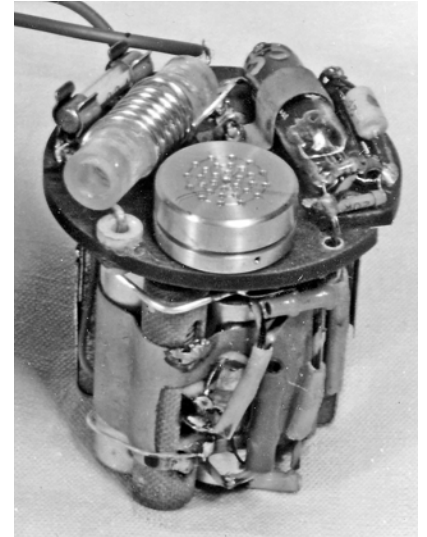




Early GDR bug AC mains version.



Internal view of AC mains bug.

Early GDR radio based bugs

DATA SUMMARY (AC mains version)

Organisation: East German Ministry for State Security Ministerium für Staatssicherheit (MfS).
Design: Ernst Krause, formerly of Funkwerk Dresden.
Manufacturer: Hohenschönhausen prison, Berlin.
Year of Introduction: 1953-1956.
Purpose: Wireless audio surveillance.
Transmitter: FM with a range of 100-500m.
Circuit features: Oscillator with RF capacitor microphone.
Frequency range: 70-80MHz.
Valve: CK5703
Power Supply: 110/220V AC mains.
Dimensions (cm): height 15 diameter 10.

References:

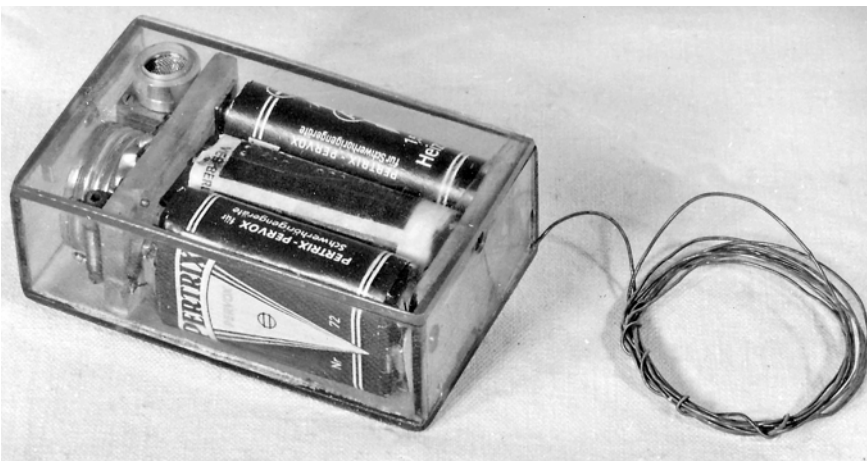
- With many thanks to Detlev Vreisleben who provided the photographs, circuit diagram and a declassified CIA report with technical data.
- Gedenkstätte Berlin-Hohenschönhausen (Wikipedia).
- (1) CIA report RDP80T00246A031900150001-1, 1956: Development of audio-surveillance equipment at Hohenschonhausen.

REMARKS

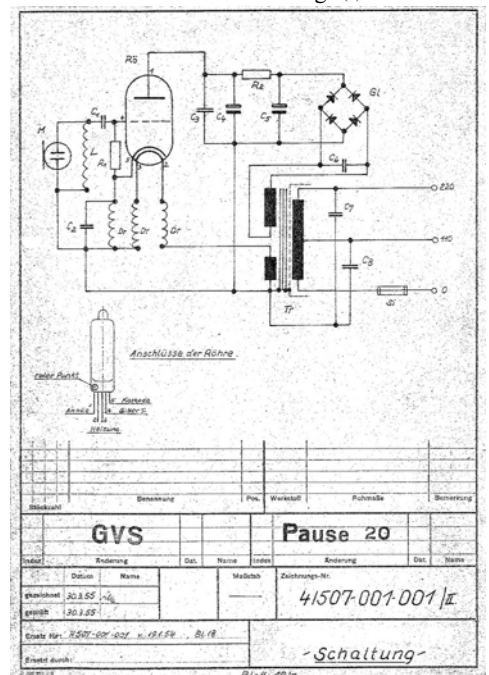
Ernst Krause, of formerly Funkwerk Dresden, was the designer of what was thought to be the first GDR miniature wireless bug. Developed at the request of the Soviets, it was assembled by political prisoners in the notorious Hohenschönhausen prison in Berlin, using components of Western origin.

Two versions of this wireless bug were produced: an AC mains and a battery powered model. The microphone, built by Krause, was probably designed by the Soviets as prisoners had been working on a similar microphone at an earlier date. It was comprised of an aluminium foil with a milled counter electrode, having the size of about 28mm diameter with a frequency response of 0.1 to 10kHz. (See also WftW Supplement Chapter 261 where a similar type of microphone was used in a Russian transistorised wireless bug).

The battery model was built on the same lines as the AC mains version, powered by three West German 'Pertrix' brand dry batteries and using a 1½V filament type of valve. It was usually concealed in unsuspected objects such as cigarettes packs, large fountain pens and in pencil cases. Further work in the Hohenschönhausen prison continued in the development of transistorised wireless bugs (1).



Battery powered version of the early GDR miniature wireless bug. It was basically similar to the mains powered version, probably using a Raytheon CK573AX (6029) 1.5V filament VHF triode.



AC mains powered bug circuit diagram.