

An overview of all currently known Russian covert VHF FM radios is provided in Appendix 3.



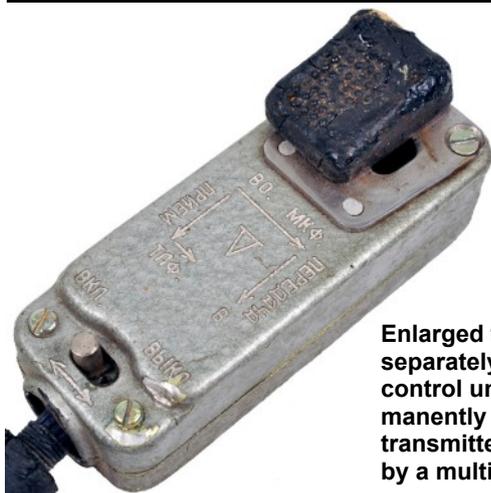
Neva Country of origin: Russia

DATA SUMMARY

Organisation: KGB and probably other organisations.
Design/Manufacturer: Kozitsky Works, Leningrad.
Year of Introduction: 1958. (1962 according to other sources)
Purpose: Covert surveillance/observation operations.
Transmitter: Free running oscillator pre-aligned on a fixed frequency between 39.33-39.66MHz (1/3 of the operating frequency of 148-149MHz), tripler/RF power amplifier, microphone amplifier and tone call generator, AM modulator. AM only. RF output 0.5-1W.
Receiver: Superregenerative detector with RF stage, AF output amplifier and tone detector driving a vibrator. Adjustable on a fixed frequency between 148-149MHz. AM R/T only.
Valves/semiconductors: Four sub-miniature pencil type valves. Transistor receiver AF stages and microphone amplifier, tone call generator, AM modulator.
Power Supply: Transistor HT inverter powered by three silver-zinc rechargeable batteries fitted in a battery holder.
Size (cm): Height 12, length 12, width 1.6, weight 560g.
Accessories: Wire aerial, rechargeable batteries carried in a separately carried Bakelite holder, vibrator unit, speaker and microphone.

REMARKS

The Neva, (Russian: Heba, named after the Neva, a river in the North-Western Russian Federation, flowing from lake Lagoda to St Petersburg) sometimes referred to as 'S-20', was a small covert VHF transmitter-receiver developed for use by KGB agents (and probably other agencies) communication during surveillance and observation operations. The set comprised three main parts: transmitter-receiver unit with permanently attached remote control unit and separate battery pack, along with microphone, speaker, wire aerial and vibrator unit. The transmitter-receiver unit was inconspicuously carried on the chest under the clothing in a cloth harness which had pockets for the rechargeable batteries and vibrator unit. A quarter-wave wire aerial and counterpoise with a safety pin on each end was usually fitted inside the sleeve or the trousers. The transmitter-receiver was fully operated by a remote control unit of which the fixed control cable was guided through the sleeve of the agents coat. A vibrator unit could be connected to draw the agents attention if his receiver was set to silent mode. The chassis was a die-cast aluminium alloy frame, divided into four compartments. The transmitter and receiver compartments had metal covers on both sides as a extra measure to reduce radiation of the superregenerative detector. A later (1968) developed radio, with similar functionality and features, was the fully transistorised and crystal controlled Kama, described in Chapter 182. The same type of remote control unit of the Neva was used with the Kama, and later Anker (Chapter 184) and Alycha (Chapter 185) covert radios.



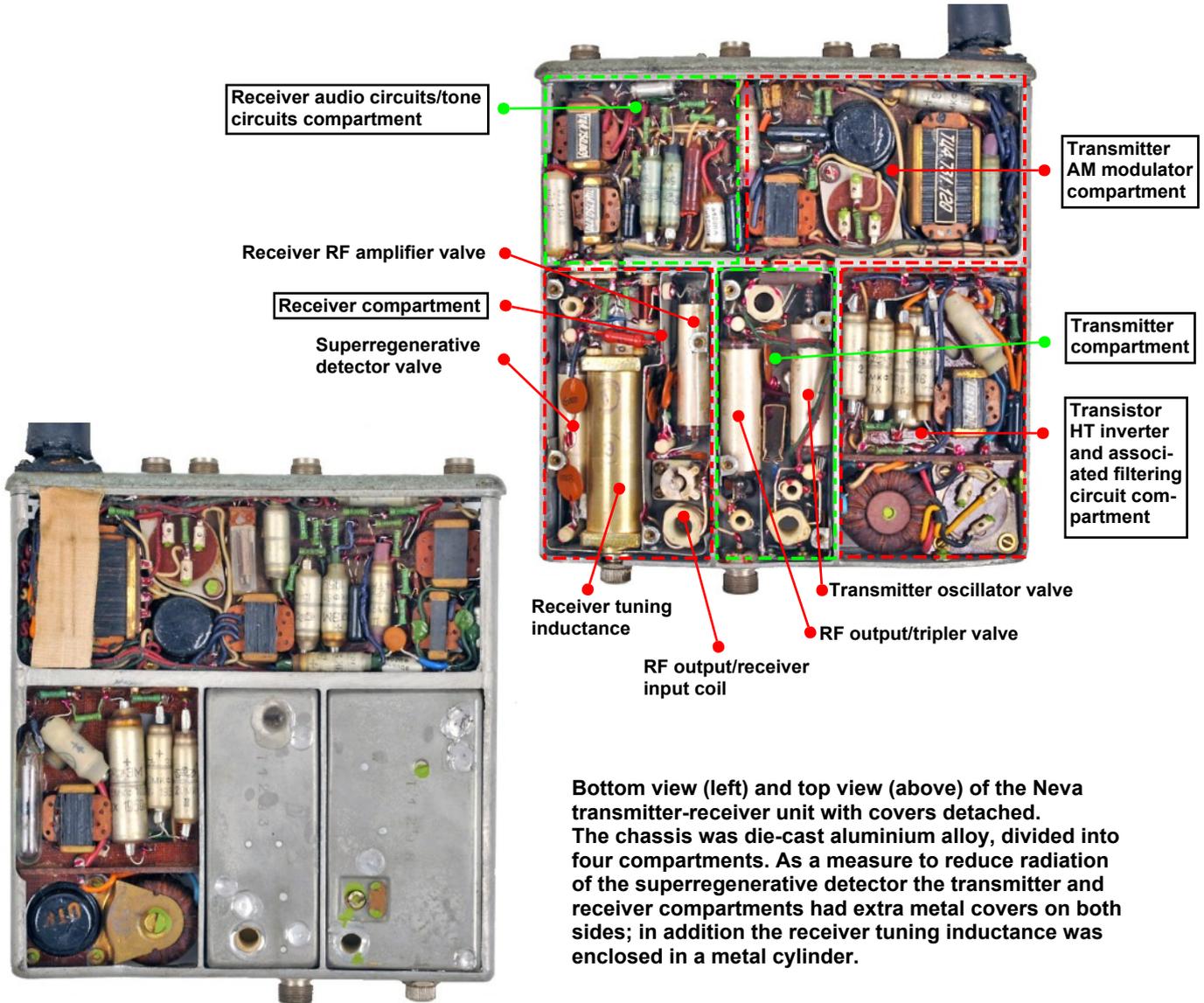
Enlarged top view of the separately worn remote control unit. It was permanently attached to the transmitter-receiver unit by a multi-core cable.



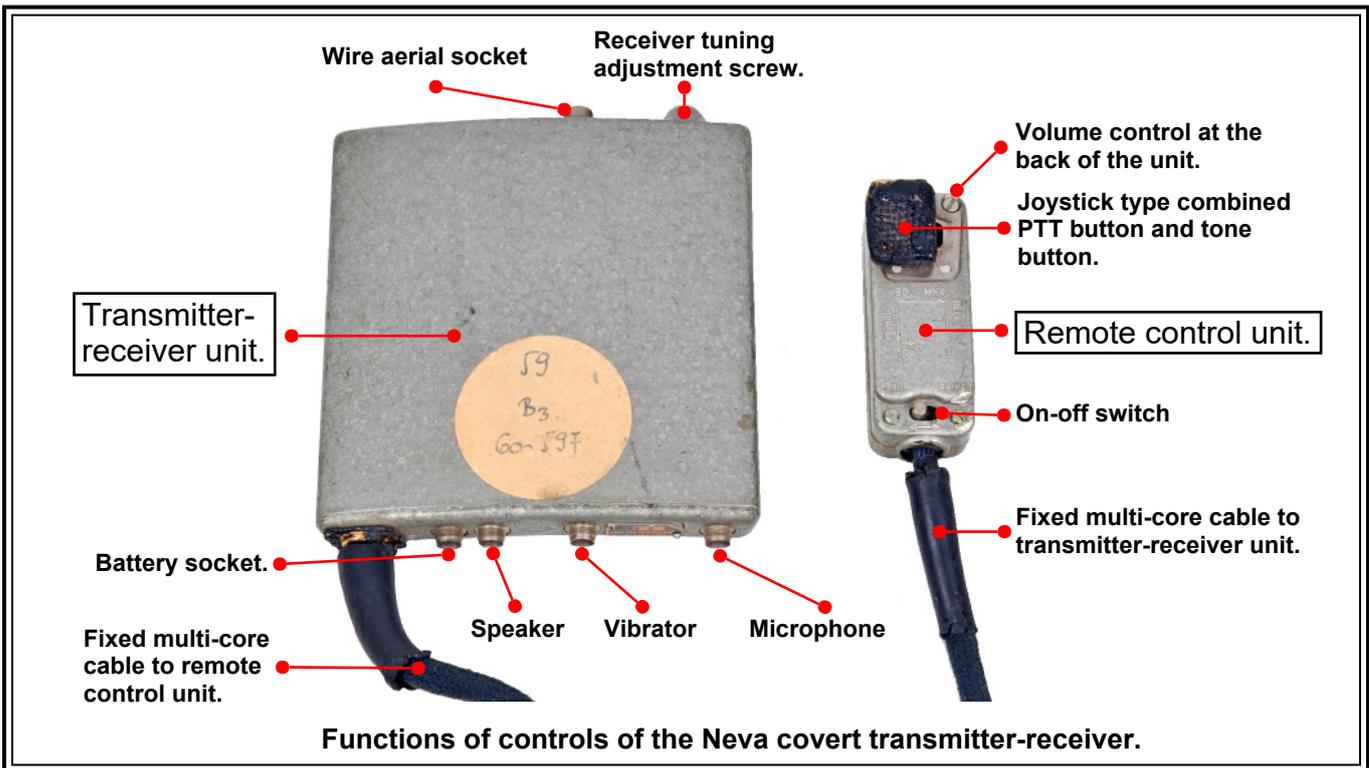
Bottom view of the Neva transmitter-receiver unit showing sockets for battery (B), speaker (T), vibrator (B), and microphone (M). Note the slightly curved shape for carrying the set on the chest.

References:

- Photographs, documents, scans and detailed information published with kind permission of the Crypto Museum, Eindhoven, Holland. For more information on the Neva see the museum website at www.cryptomuseum.com



Bottom view (left) and top view (above) of the Neva transmitter-receiver unit with covers detached. The chassis was die-cast aluminium alloy, divided into four compartments. As a measure to reduce radiation of the superregenerative detector the transmitter and receiver compartments had extra metal covers on both sides; in addition the receiver tuning inductance was enclosed in a metal cylinder.



Functions of controls of the Neva covert transmitter-receiver.