



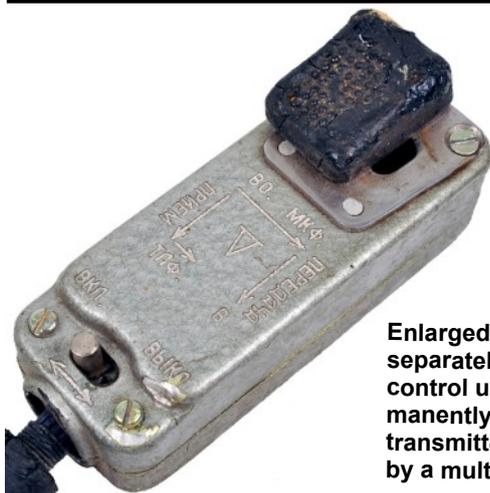
Neva (S-20) Country of origin: Russia

**DATA SUMMARY**

**Organisation:** KGB and probably similar organisations.  
**Design/Manufacturer:** Kozitsky Works, Leningrad.  
**Year of Introduction:** 1958.  
**Purpose:** Agents during surveillance 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 separate Bakelite holder, vibrator unit, remote control unit, earphone and microphone.

**REMARKS**

The Neva, (named after the Neva, a river in the North-Western Russian Federation, flowing from lake Lagoda to St Petersburg) officially known as 'S-20', was a small covert VHF transmitter-receiver developed for use by KGB agents (and probably other agencies) communication during surveillance operations.  
 The set comprised three main parts: transmitter-receiver unit, remote control unit and battery pack, along with microphone, earphone, 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 with a safety pin at the 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 developed model, with similar functionality and features, using the same remote control unit, was the fully transistorised and crystal controlled Kama (T-47/50) described in Chapter 151.



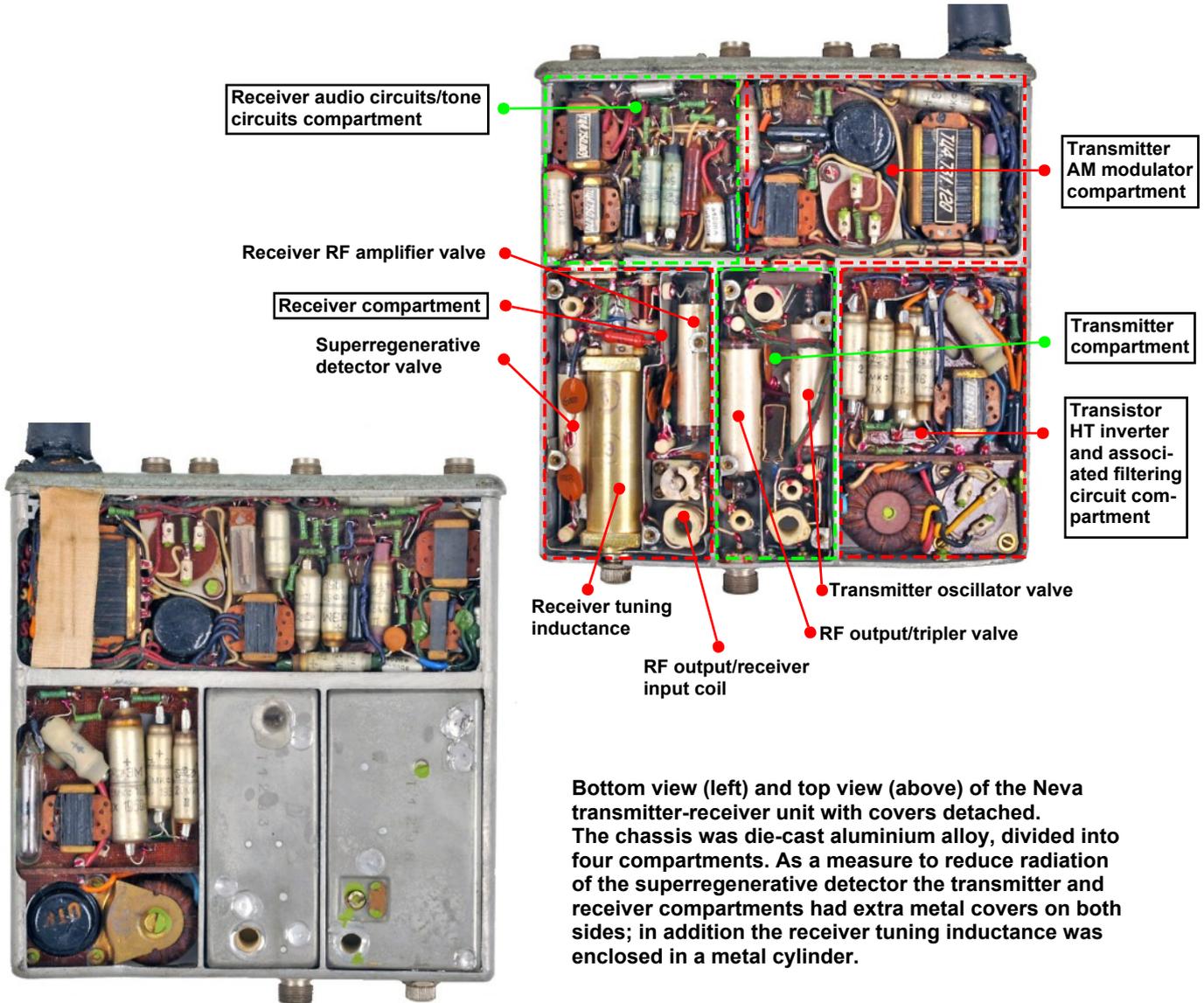
Enlarged top view of the separately worn remote control unit. It was permanently attached to the transmitter-receiver unit by a multi-core cable.



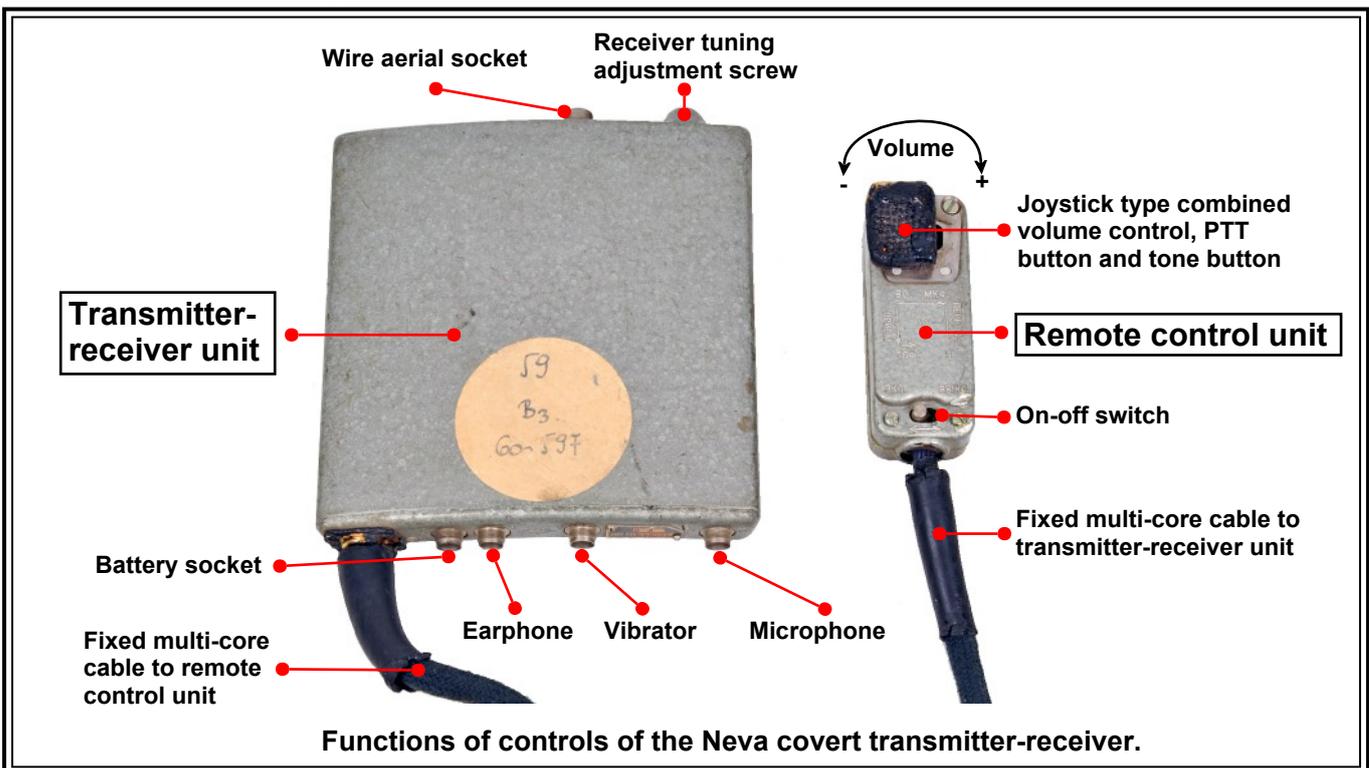
Bottom view of the Neva transmitter-receiver unit showing sockets for battery, earphone, vibrator and microphone. Note the slightly curved shape for carrying the set on the chest.

**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](http://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.