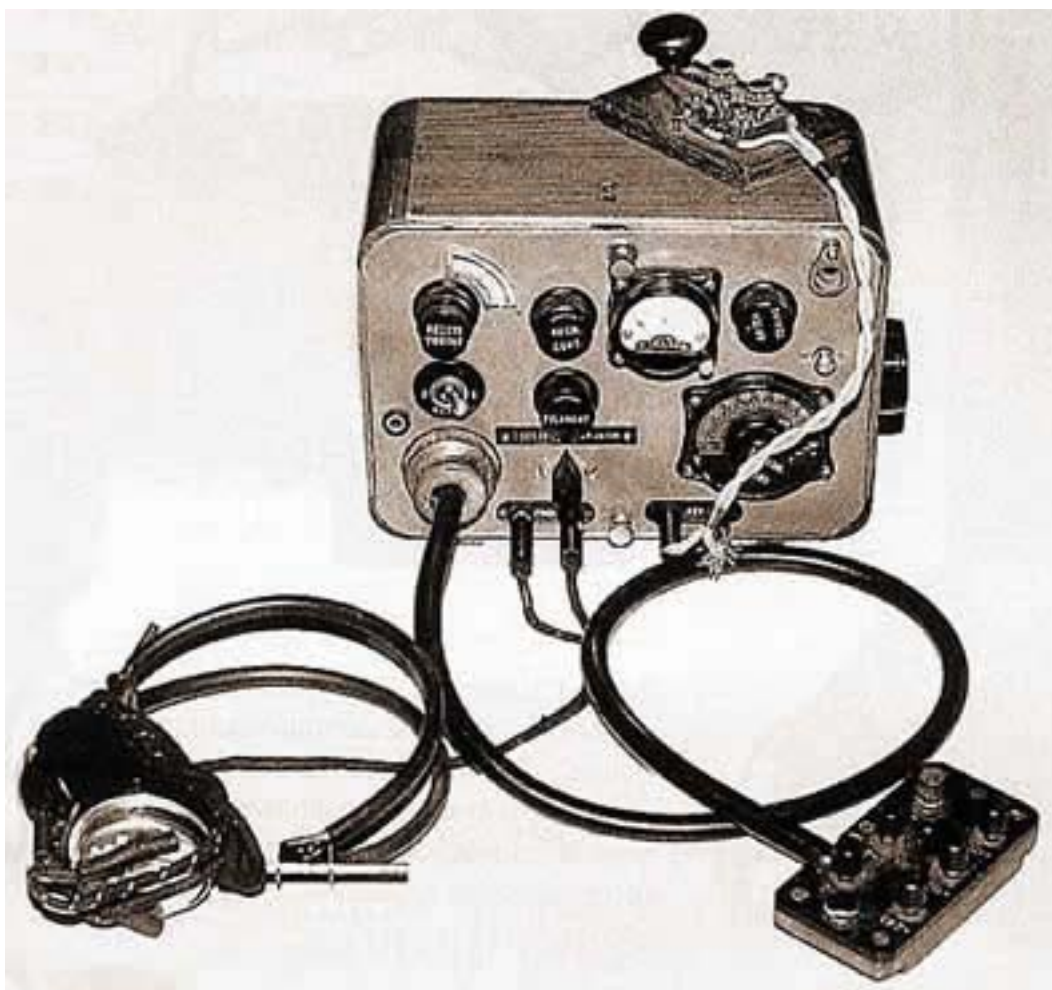


Soviet Spy Radio "SEVER"

Credit Line: www.cqham.ru

The radio was designed at 1939. Schematic for the Radio "Sever" ("North" in English) was designed by Boris Mikhailin. At first it was designed for civil applications. Only one experimental sample was made before 1941. At the 1941 the radio was adapted for military applications by Boris Mikhailin, Pokrovstiy and Muhachev (mechanical design). It was so named "Project Omega."

Serial release of the station was begun in Leningrad, at "Kozitskiy" factory. At the factory the station got name "Sever." The station was produced by supervising of Nikolay Stromilov- famous polar radio operator and ham. 7000 samples of the radio were produced during ww-II.



Spy Radio "Sever"

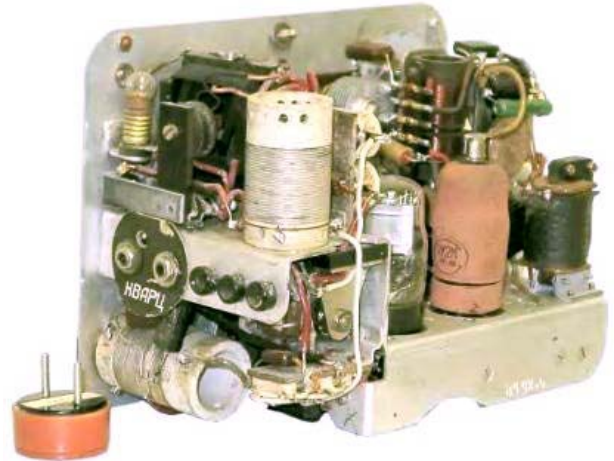
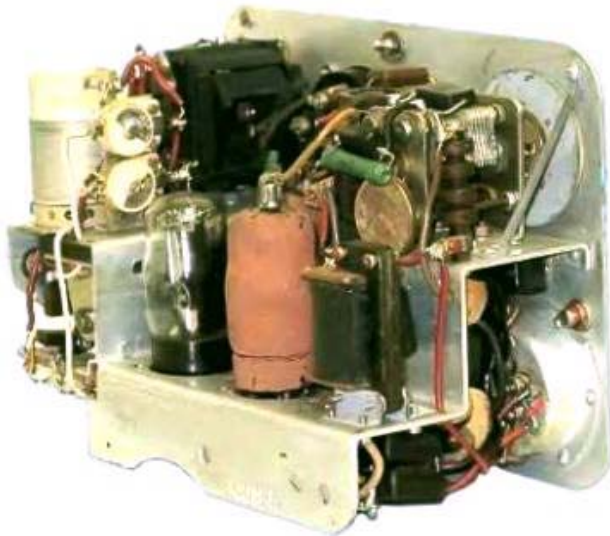


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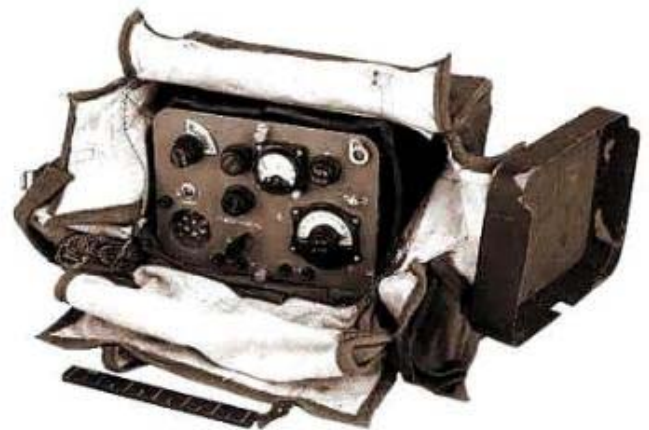
The radio had excellent parameters for the times. To reduce dimension and consumer power so- called transceiver schematic (when the same parts are used for receiving and transmitting) was used. So, the radio had weight only 2- kg (or 4 pounds) that was perfect for ww-II radio. Antennas and spare parts had weight 2- kg (or 4 pounds). Batteries weighted 6- kg (or 13 pounds). The radio set was packed in two small fabric bags. **Figure 1** shows the schematic. Some of the samples of the "Sever" were marked in English and American or English parts were made for producing of the stations.

Receiver was made by usual at the times scheme 1-V-1. It had one aperiodic RF-Amplifier and then a Regenerative stage. Hi-ohmic head set was used by a radio operator.

Transmitter had output power near 2-Watts. It has RF generator and then power amplifier. RF generator could work in two modes- first, using external quartz resonator (usual there were several of them in the radio spare parts), second, in self-excitation mode covered a wide frequencies range. A small key was used for transmitting.



Credit Line for Pictures: <http://msevm.com/oldradio/sever/>



Tube 2P4M (used in the Radio "Sever")

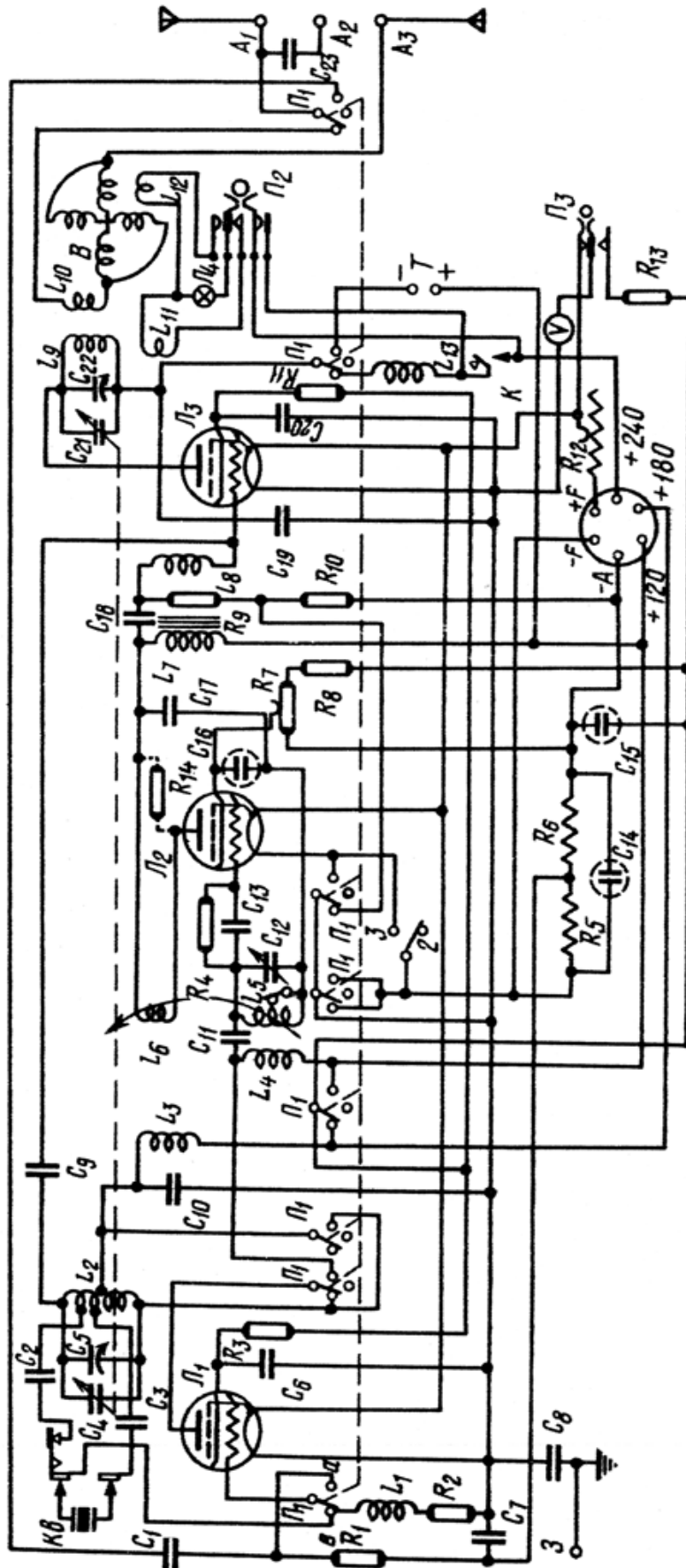


Figure 1 Radio "Sever"

It was produced "Sever" and "Sever-bis." The radio differed by frequencies and a little in design. RX/TX for radio "Sever"- 3,62—12,25/3,62—6,25 –MHz. RX/TX for radio "Sever- bis"- 2,22—6,66/2,56- 5,77- MHz.

There were used anode and heater battery for feeding the radio. For high voltage there were used 4 batteries BAS- 60 (each battery has 60-V and 0.45A/H). For heater there were used 2 battery 3S (each battery has 1.5- V and 29.0 A/H). It was produced in small quantity radio "Sever" with feeding from the main.

Antenna for the radio was length of wire in 12 meters long. The wire could hang up at any object (for example, at tree). There were two counterpoises, 3 and 12 meter long each.

Depending on the transmitting frequency a proper counterpoise was used. As usual, for low frequencies it was used counterpoise in 12 meter length, for high frequencies it was used counterpoise in 3 meter length. Counterpoise placed near one meter above the ground. **Figure 2** shows the antenna configuration for the station. The radio could provide reliable communication (with a stationare radiocenter with special directed antennas and high sensitivity receivers) up to 700- km.

British spy Radio "Paraset" was the nearest analog of the radio "Sever."

Manual for radio Sever may be loaded: www.antentop.org/014/sever_014.htm

Credit Line: <http://www.rkk-museum.ru>

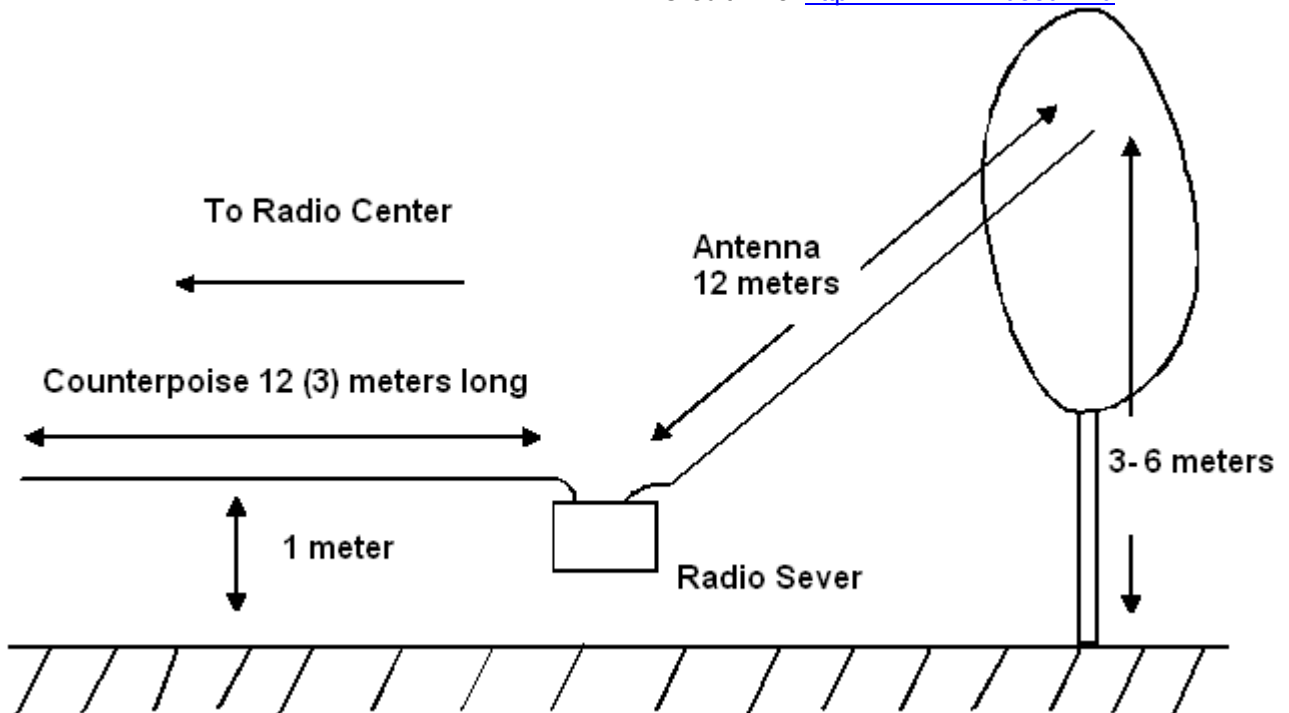


Figure 2 Antenna for the Radio "Sever"



Spy Radio "Sever"

Credit Line for Pictures: <http://rv3bc.narod.ru/Stat/rtx-sever.htm>

