

Severok K Country of origin: Russia

DATA SUMMARY

Manufacturer: Sarapul radiozavod, Republic of Udmurtia.

Year of Introduction: 1993.

Purpose: Special forces.

Receiver:

Circuit features: Double conversion superhet.

Frequency coverage: 2.8-7.399MHz in a number of 100kHz segments in 1kHz increments covered by plug-in RF units. USB and CW.

Transmitter:

Frequency coverage: See receiver. USB and CW.

RF output: 10W (Not yet confirmed)

Aerials: Kulikov vertical rod aerial 2.5m with counterpoise; inverted V dipole wire aerial with 4m support in centre.

Range: With 2.5m Kulikov and counterpoise 30km; with inverted V dipole 2x6m using 4m support in centre ≥200km.

Power Supply: 12.6V. 10NKP-6c rechargeable 6Ah batteries fitted in a belt, or external source.

Power consumption: 100mA receive; 5A transmit.

Size (cm): Height 22, Length 5.6, Width 11.5.

Weight (kg): 1.35kg.

Accessories: Aerials, BGAN headset assembly, battery belt, battery charger, 11 plug-in RF units, DKM-s high speed Morse keyer, power cable assembly, spares, a hand speed Morse key was mentioned in one source.

REMARKS

Severok K was a small and lightweight backpack HF radio for use in the field by special forces and units of interior troops of the Russian Federation. The set was primarily intended for USB voice, with the option of transmitting high speed five digit CW messages by means of the associated DSM-s Morse keyer. A separate secure voice unit, known as Block S, was plugged into the rear of the main chassis. Considering the time of its development (early 1990s) the miniaturisation was a achievement which was primarily reached by the choice of separate plug-in RF units covering just a small part of the spectrum (100kHz in 1kHz increments). Noted is a later version known as Severok KM which covered 3-30MHz with digital voice. (On a forum the existence of a 7.5MHz RF-unit was mentioned, this is doubtful as not within its frequency range).



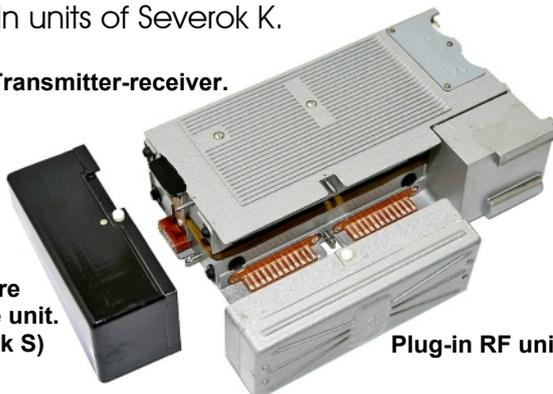
Severok K packed in metal unit transport case. For operational use in the field the loudspeaker and most of the plug-in RF units were not required.

Main units of Severok K.

Transmitter-receiver.

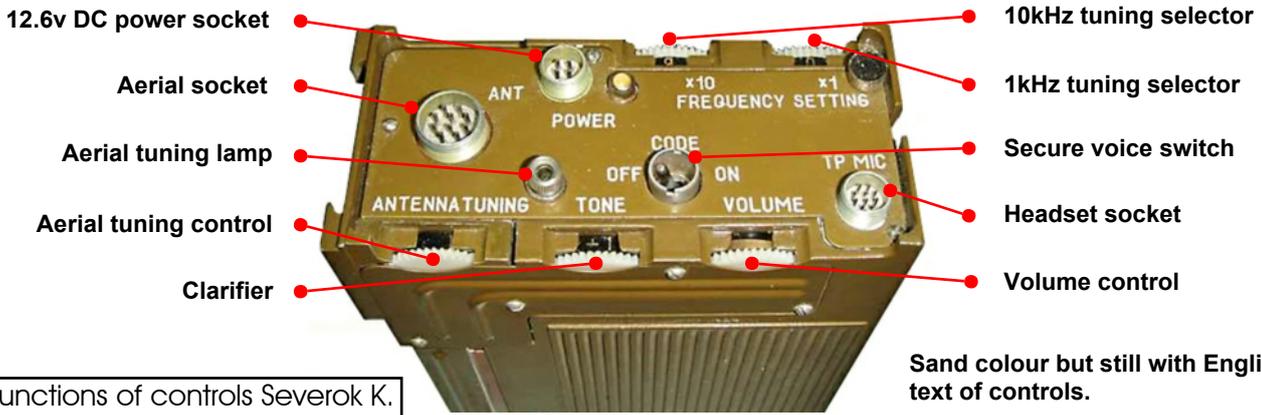
Secure voice unit. (Block S)

Plug-in RF unit.



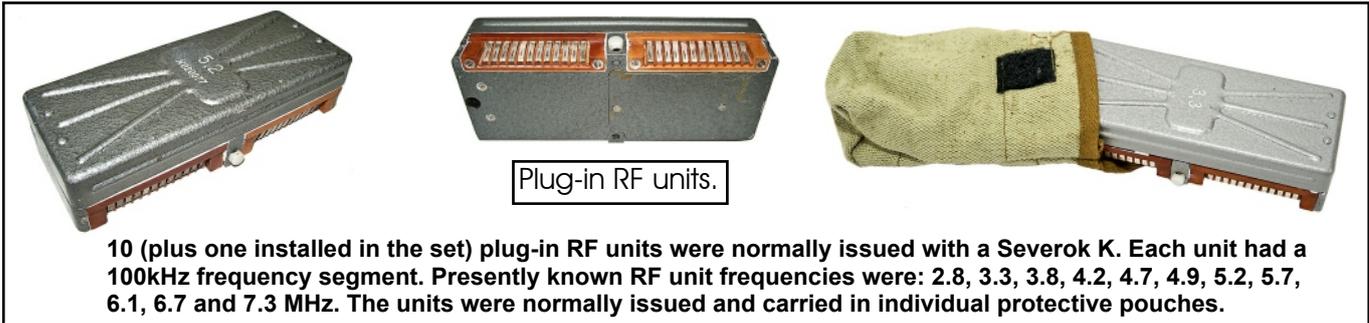
References:

- This chapter is an abridged version based on a full description of the Severok K in www.cryptomuseum.com
- Photos taken from a Severok K held in the collection of the museum, and information from the website was published with kind permission of the Crypto Museum, Eindhoven, Holland.
- Snippets of additional information retrieved from Internet sources.



Functions of controls Severok K.

Sand colour but still with English text of controls.



10 (plus one installed in the set) plug-in RF units were normally issued with a Severok K. Each unit had a 100kHz frequency segment. Presently known RF unit frequencies were: 2.8, 3.3, 3.8, 4.2, 4.7, 4.9, 5.2, 5.7, 6.1, 6.7 and 7.3 MHz. The units were normally issued and carried in individual protective pouches.

A Severok K painted brown with English text. (Right)

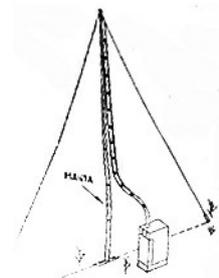


DKM-s high speed Morse keyer.



Two aerial versions.

2.5 m Kulikov aerial on a short mast with two counterpoise wires.



Inverted V dipole (2x6m) supported by a collapsible 4m glass fibre mast.

The loudspeaker was intended for use at base locations.



Power source.

The batteries in a belt (above) and battery charger (left) were similar as used with the R-394 K and KM.