Historic equipment

The picture of communications receiver R-399A was supplied by Rimantas Pleikys. It was made around 1986 in the Kharkov radio plant, Ukraine.

Starting from mid-80's R-399A, as well as Katran (predecessor of R-399A, navy version) and aged tube R-250 M (several modifications) were the main working horses at many Soviet military and non-military radio receiving centers, including the sigint/comint collection sites, jamming control stations, etc.

The radio in the picture was in operation at the monitoring post of the Vilnius radio jamming "Object Nr. 600" until the end of 1988. The main characteristics of R-399A are as follows:

- Frequency range: 1.0 - 32.0 MHz
- Tuning steps: 1 / 10 Hz 1st IF: 34785 kHz 2nd IF: 215 kHz
- Sensitivity: AM - 2.5 microvolts; CW, SSB - 0.6 microvolts
- Modes: AM, CW, USB, LSB
- Bandwidths: 0.3 / 1 / 3 / 4 / 6 / 10 kHz (40 kHz for the panoramic indicator)
- Power consumption: < 200 W Dynamic range: > 70 dB
- Operation temperature range: -10...+50 deg. Celsius
- Weight: receiver - 40 kg, PSU - 15 kg
- Frequency selection: tuning knob, direct entry, memory (60 channels automatic scanning (variable speed)
- Attenuator: -10, 20, 30, 40 dB BFO: -5...+5 kHz
- Voice frequency filters: 3.4 / 8 kHz The depicted set has been modified, it has a few additional capabilities:
- Frequency range: 10 kHz - 32 MHz (added VLF, LF and part of the MF band between 10 kHz and 1 MHz)
- Tuning steps: 1 / 10 / 100 Hz (added 100 Hz step) A kind of "S-meter" (not real)

This is a picture of the Speech/Morse generator that was used by the STASI and Russian intelligence.

Picture by Detlev Vreisleben

Video's on YouTube by Peter Staal
Video 1
Video 2
Video 3
Video 4
Video 5
Video 6

KG-84 encryption device

KG-84A/C encryption device, used by many military forces.

It was developed to ensure secure transmission of digital data.

The system is no longer produced.

The KG-84A and KG-84C operate in simplex, half-duplex, or full-duplex modes.

Signals Intelligence

The wartime FuMB 4 Samos heterodyne receiver was manufactured by Rhode & Schwarz. The receiver was used to detect enemy radar beams and for direction finding. It was mainly used by the Luftwaffe and U-boats of the Kriegsmarine. The frequency range was 90-480 MHz.