

# Underground Antennas of the Military Radio Center and Missile Silo

Credit Line: Forum at [www.cqham.ru](http://www.cqham.ru)

**AlexanderT**

On the far 80-s I have seen how it was constructed an underground antenna. Near a military base (where I served) in the forest it was flattened two field. Every field had dimension similar to a football field. Cables in diameter like my arm were placed and then buried by a layer of sand in the 50-cm thick.

I remember that it was used a sea coarse sand with shelly. The antennas were fenced and security systems were installed there.

**Figure 1** (taken from GOOGLEMAT) shows the above described antenna. Near the left side you can see rectangular of the one parts of the underground antenna. Second part of the antenna (recently partly under a parking lot) is in the right side of the picture.



**Figure 1** Underground Antenna

**4L1FL**

I would like to say that I was involved into montage of the underground HF antenna "Astra." It was in 1964. The antenna was constructed on the Radio Receiving Centre that was located in the forest near Novosibirsk. It was receiving underground antenna.

I very clearly remember the antenna. It looks like a menorah. However the candlesticks were near 50-meters long. The candlesticks were made from a coaxial cable. I believe it was mix Russian coaxial cable RK75- 4-11 with unknown to me 50- Ohm coaxial cable. I remember that along the cable the plastic insulation and braid were removed on every 2- 3 meter. The part of the cable with removed braid was sealed by molten polyethylene in the special mold. The menorah was installed in the sand mound in to depth of near 50- cm. The sand mound was 20 meters in width 60- meters in long and 1- meter in height. Light slope (may be 5- 10 degree) was in the direction of the receiving.

I remember that it was used special sand for the antenna. The sand looks like a sea coarse sand.



Menorah



Old Russian Receiver KVM

Credit Line: [http://oldradio.onego.ru/R/kv\\_m.htm](http://oldradio.onego.ru/R/kv_m.htm)

## ANTENTOP- 01- 2011 # 015

The antenna worked up to 12 (or 18)- MHz (as I remember). Crew of radio engineers from Moscow came to tune the antenna. It was very classified antenna. No one was at the site when the engineers tuned the antenna.

It was not only one underground antenna at the Receiving Centre. Underground antennas for Long Wave were used there. There were ferrite antennas. However I did not see the antennas (because there were also classified). My commander, lieutenant, give me a write- off receiver *KVM* when I ended my serve at the Radio Centre. I did the first step to the Amateur Radio with the receiver. I never read about the antenna "Astra" somewhere. It looks like the antenna is still classified.

CMGnic

**(Note I. G.:** CMGnic made some pictures at old stripped underground silo of intercontinental ballistic missile. The pictures show remains of the real underground antenna named "Bruschatka.")

**Figure 2** shows the remains of the antenna "Bruschatka." Such antenna is almost at any underground silo of intercontinental ballistic missile. Somebody told me that the antenna belongs to Russian System "Perimeter." I do not know...

**Figure 3** shows cap of the antenna. Contact plates are under the cap. **Figure 4** shows an underground gallery to the antenna with some strange metallic lustre mastic.

**Figure 5** shows big cap of the antenna. **Figure 6** shows remains of the well of the antenna. **Figure 7** shows another view of the destroyed antenna. **Figure 8** shows signal cables in the underground gallery to the antenna "Bruschatka."

Credit Line to the Figure 2- 8:  
<http://my.mail.ru/mail/rw4cmg/>

System "Perimeter" (or Dead Hand):  
[http://en.wikipedia.org/wiki/Dead\\_Hand\\_\(nuclear\\_war\)](http://en.wikipedia.org/wiki/Dead_Hand_(nuclear_war))

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**Figure 2** Antenna "Bruschatka"



**Figure 3** Cap of the Antenna "Bruschatka"



**Figure 3- bis** Cap of the Antenna "Bruschatka"



**Figure 4** Underground gallery to the antenna with some strange metallic lustre mastic



**Figure 6** Remains of the well of the Antenna "Bruschatka"



**Figure 5** Big cap of the Antenna "Bruschatka"



**Figure 7** Another view of the destroyed Antenna “Bruschatka”



**Figure 8** Signal cables in the underground gallery to the antenna “Bruschatka”