

## The Wonderful Beverage Antenna

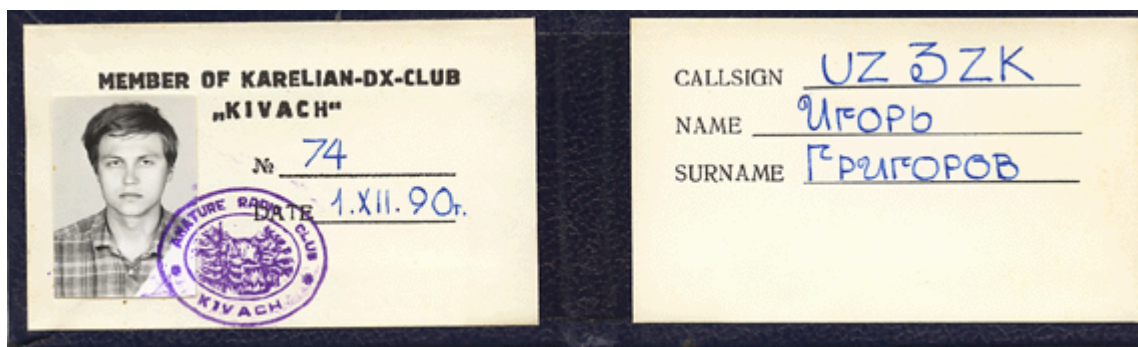
- *What antenna do you use?*
  - A Beverage antenna.
  - *A Beverage antenna? What is it?*
  - Well, it is just a very, very long wire...
- (From lots QSOs EK1NWB)

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\*Published with a little cutting

**EK1NWB Prehistory:** In 1991 (how it is far from the time!) the Karelian DX-club Kivach has organized DX -expedition on Kizhi island, which is located in Lake Onega. I was a member of the club, so I with pleasure took part in the expedition. The DX- expedition took place from July 24 till August 8, 1991.

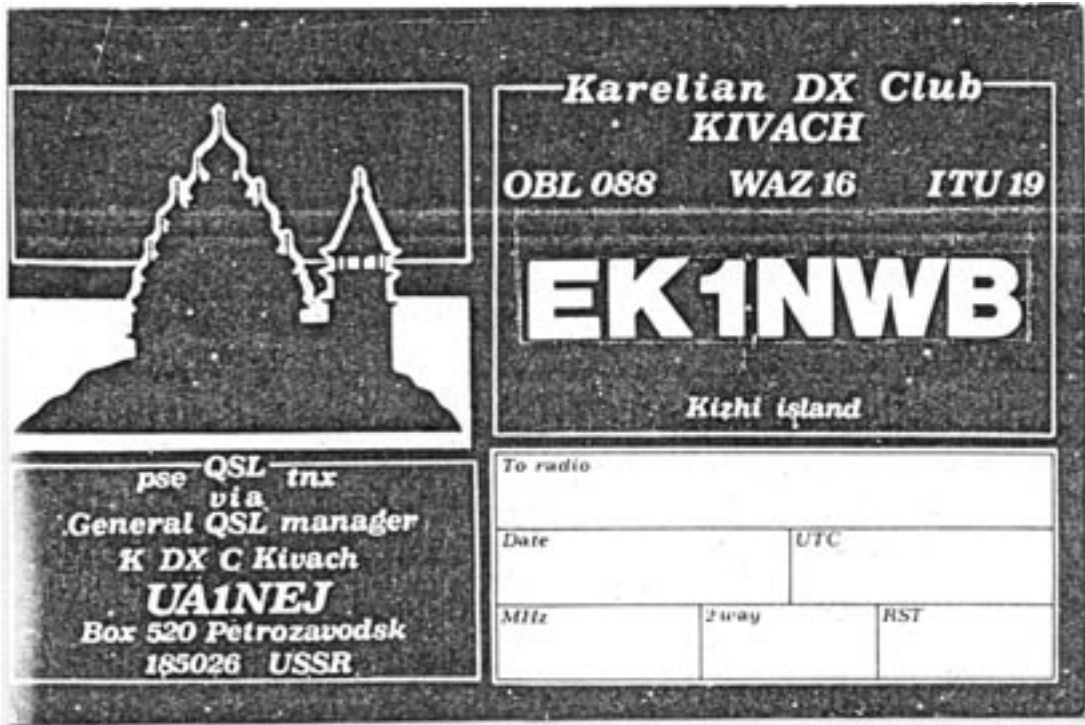


**Membership card of K- DX-C  
Issued for my new call UZ3ZK**

**Landing:** The first group of 6 hams was landed to Kizhi near 8.00 p.m. of July 24,1991. After we had moved almost 1000 kg (2200 pounds) of our stuff to the site of our expedition, it was approximately 2 kilometers from the landing place, we have begun to set tents. Then UA1NDR and UV3VJ did connection to an emergency power main of the local Fire Service. At last, by to 00.00 a.m. our tents were installed, we had 220 Volts inside the main tent, our equipment was ready for operation, but we had no antennas.



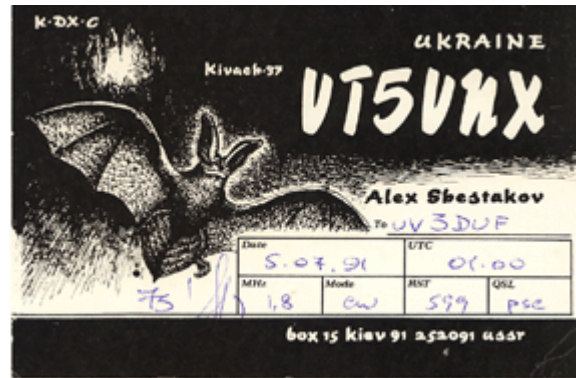
**Main tent EK1NWB  
(Old Military Tent)**



QSL CARD of EK1NWB

Printed in Belgorod by one of the Sponsor of the DX- Pedition, Joint- Stock Company Progress

**The First Antenna:** Before the DX- pedition we were discussed what antenna would be the first. I offered Beverage antenna. It was very easy to install, it can work at all amateurs HF- bands and I already had been used the antenna at my station UA3ZNW for 2 years. Almost ten minutes prior the boat had gone to Kizhi, UA1NCR has brought a transformer 50/300-Ohm (coiled on a ferrite ring from a color 27" TV) and UA1NDJ has brought a load for the Beverage. It was a numerous quantity of 18,000 Ohms resistors soldered in bridge. The load had 350 Ohms. UT5UNX, who was with us, had a bay of wire, which had gone to the Beverage



QSL Card of UT5UNX



The Load of the Beverage



**The Transformer of the Beverage**

**Installation of the Beverage Antenna:**

So, after night supper, it was 01.00 a.m., at dim light of polar night UA3ZNW, UA1NEQ and UV3DUF begun to install the Beverage. We put near 200 meters of wire in straight line to South- West. The wire was sitting at 0.7- 1.5 meters above the ground. Bushes, small trees and dry sticks were supported the wire.

At the feeding end we did grounding to an old steels mast, which ten years ago was carried antennas for the Fire Service but for now the mast was unused by the service. At the load end we installed artificial ground, 6- lambda/4 counterpoises for 10, 15, 20, 30, 40 and 80 meters. At the bands, as well as at 160 meters, the Beverage had SWR better the 1.5:1.

Figure 1 shows the Beverage

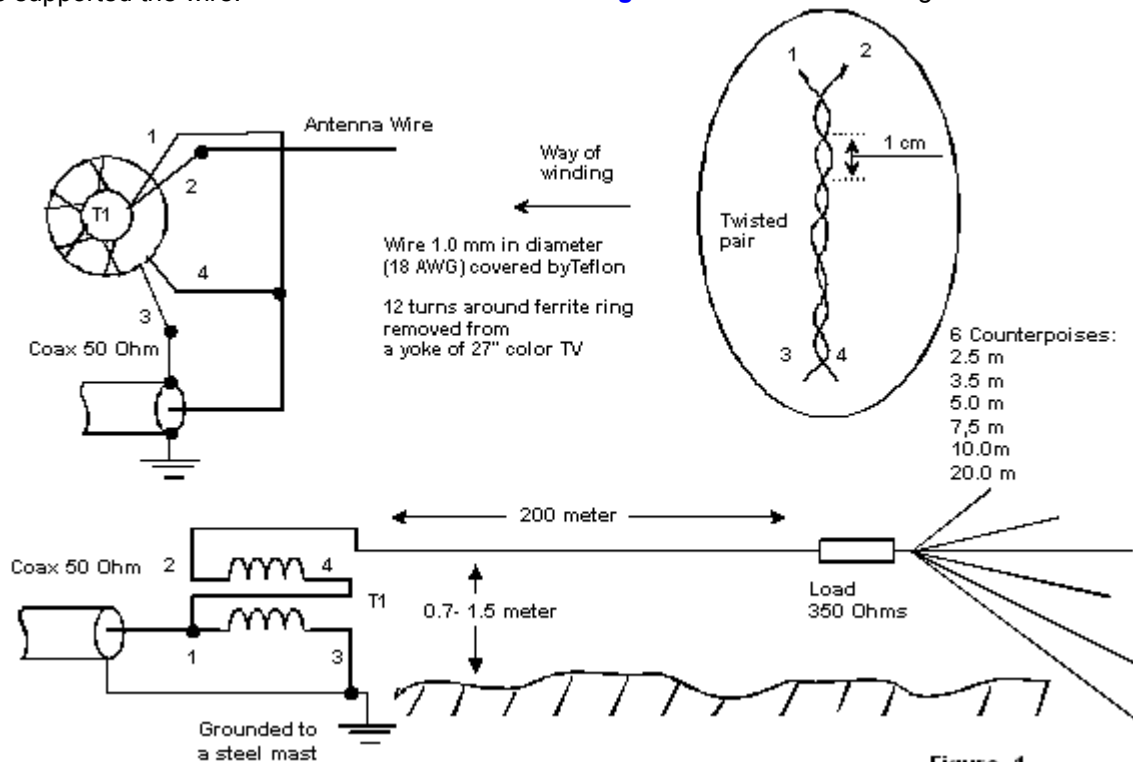
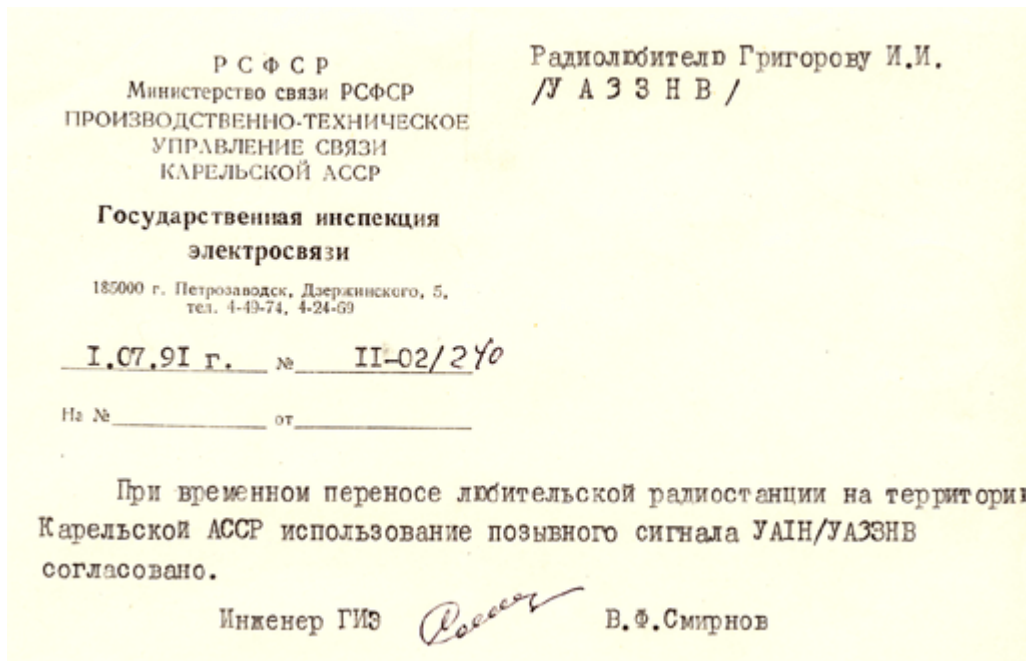


Figure 1



### Permission to use callsign UN1/UA3ZNW

**The Beverage on the Air:** At 2.00 a.m. EK1NWB began the operation on the Air. 160, 80, 40 meters – at all of the bands we had received good RS in both sides. Morning came, came opening at 20, 15 and 10 meters. Again, we had received good RS in both sides. The Beverage worked well, worked despite of open expressed scepticism of some members of the DX- expedition.

### Comparison of Real Antennas with the Beverage:

Later we had installed “Real” HF- antennas, it were double squares for 20-15-10 -meters, a vertical for 10-40-m, two I.V. for 80 and 160-m. Some members of the expedition believed that the antennas did the trick.



Kizhi. Inside the main tent. 02.00 am, July 28, 1991

But... through some times, it was happened, we had noticed that very often the Beverage worked better the “Real” antennas. It was impossible to explain however lots members of the pedition preferred the Beverage rather than the good antennas. I do not know, why the Beverage could beat such efficiency antennas, may be it is effect of the North propagation...

**End of the Beverage:** In a week, at light polar night, UV3VJ had cut off counterpoises for 80 and 40 meters from the Beverage. He had explained that he needs the wire for inclined dipoles for 30 and 17 meters. Well that, inclined dipoles made by him were good done and had SWR 1:1. But only nobody answered on these good dipoles. We continued to use for 30 and 17 meters the Beverage. The useless dipoles were swing by wind and gave us feed for evening discussion – Why the dipoles do not work at all but the Beverage works fine.



Installation of the Square for 10- 15- 20- meters



**Kizhi. Special Stamped Envelope**

The Beverage SWR was raised to 1,8:1 at 160, 80 and 40- m after cutting off the counterpoises. Anyway the Beverage worked perfect on these ranges. In another week later a herd of Gipsy horses, which is rushing through the island, destroyed the Beverage

**Results of the Beverage:** Well, what is possible to say about the Beverage? Certainly, we had mentioned the small efficiency of the Beverage at transmitting mode at low HF- bands 160 and 80 (and sometimes 40-m) meters. But on the upper HF- bands 30- 10 meters the Beverage worked very well. Sometimes the Beverage worked better the double squares for 20-10-m. Certainly, it is only subjective opinion of the members of our expedition. All members the pedition were agreed, that the Beverage should be used at next pedttions.

**P.S:** Some readers familiar with the history of the USSR have paid attention for the date of our expedition. It was before August putsch 1991, after which lots changes came...



**Kizhi. Windmill**



**Moscow, August 1991**



**Moscow, August 1991**