

Flat EH- Antenna for 10- MHz in the Winter

Continued from ANTENTOP- 01- 2010
Flat EH- Antenna for 10- MHz
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Credit Line: http://ehant.grz.ru/exp_eh31.htm

In three weeks the winter came in my town. I made more the 100 QSOs with 25 countries using power 30- Wtts. Antenna was covered by snow but it is worked. I did lots QSOs with the snow- EH-Antenna. As rule I could make QSO with any station that I heard.

It seems that the weather did not influenced onto the antenna. Really when I measured parameters of the antenna I discovered that it were unchanged. **Figure 8** shows Flat EH- Antenna covered with snow.

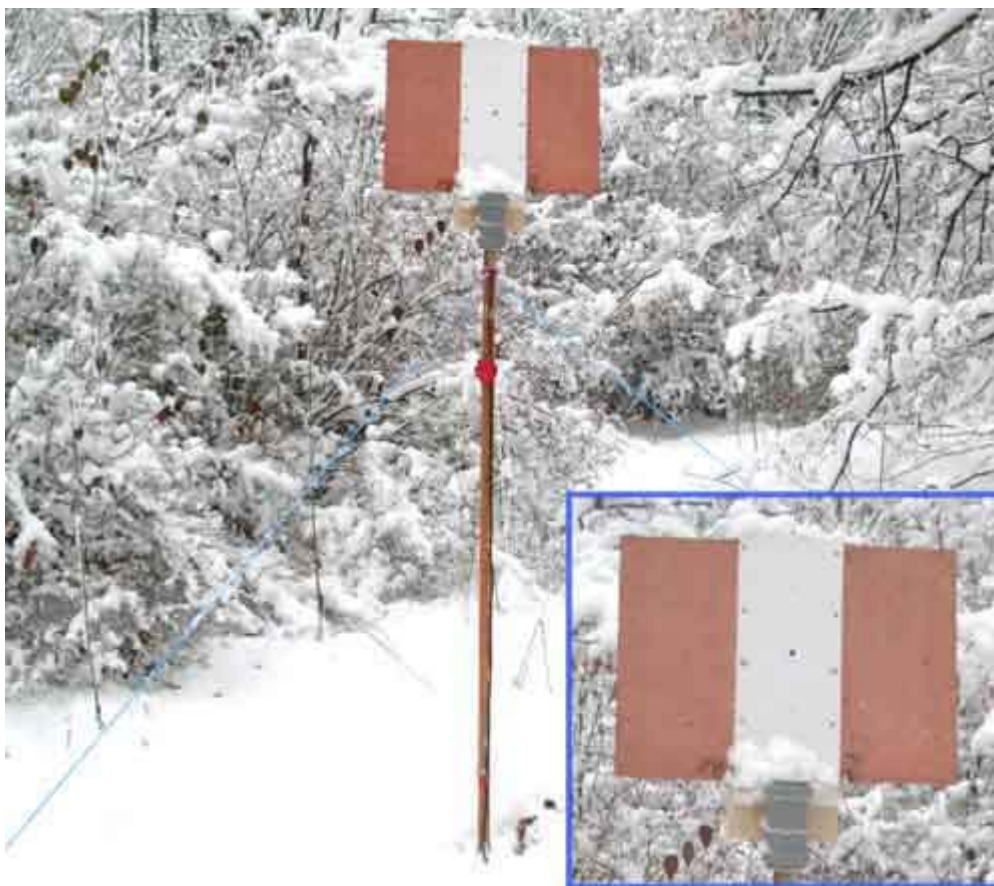


Figure 8 Flat EH- Antenna covered with snow

Snow fall, then thawed, and again fall down. Antenna was still working. However I decided to bring the antenna indoor and checked it. Antenna begun to thaw out and water was coming from the antenna. From hermetic (as I believed) coupling water begun to drop. I remove caps from the coupling and discovered there near 10 grams of water. **Figure 9** shows water dropping from the coupling.

Conclusion- simple "Glue- Gun" sealing cannot provide full hermetic. After the antenna was fully dried, I checked the antenna parameters (they were unchanged). Then the antenna was assembled again, covered "protected" bag and installed at the old place. **Figure 10** shows new installed Flat EH- Antenna.



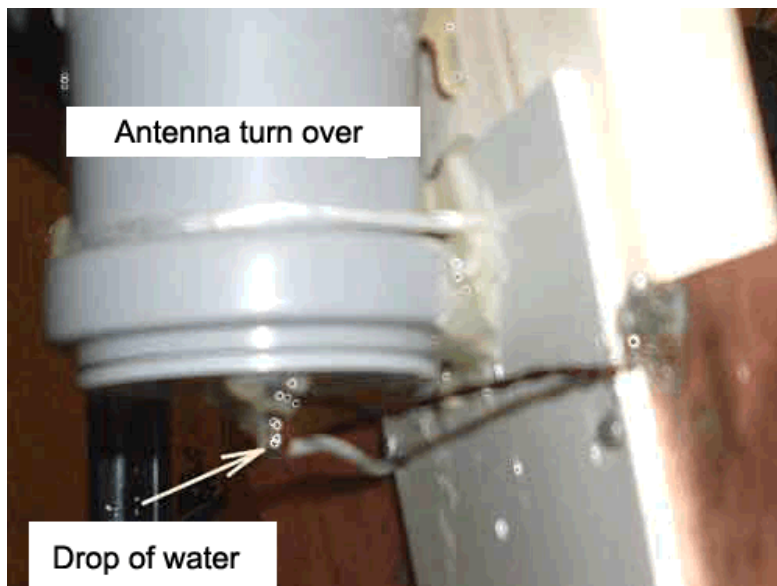


Figure 9 Water is coming from “hermetic” coupling



Figure 10 New Installed Flat – EH- Antenna

I checked the antenna in the Air- working excellent. OK, I will test the antenna further.

Table 1 Theoretical Data of the Inductor for the 7, 10, 14 and 18- MHz Band.

Flat EH- Antenna may be tuned on to others bands. Design of the antenna is leaved the same only numbers of coils are changed in the inductor. **Table 1** shows the Theoretical Data for the others bands.

73!

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Band	Theoretical Data for Inductor
7 MHz	60 turns
10 MHz	39 turns
14 MHz	24 turns
18 MHz	17 turns