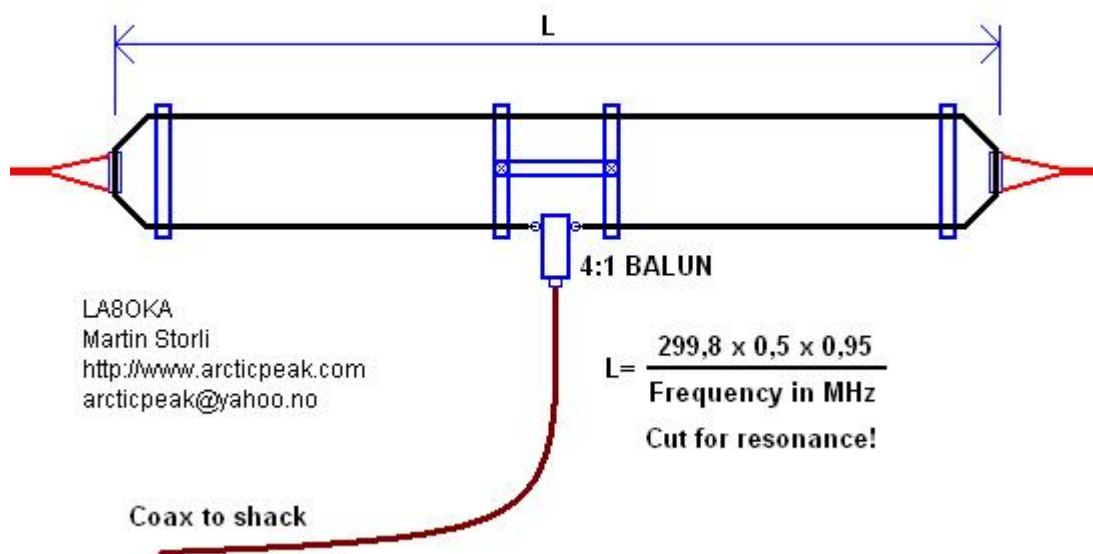


The Folded Dipole

The Folded Dipole is not used much amongst Radio amateurs, probably due to the fact that this antenna uses twice as much wire as a single-wire dipole. And the Folded dipole doesn't do well as a multi band antenna either. But the folded dipole does have some advantages over a single-wire dipole, the biggest advantage is that the folded dipole is more wide banded and pick-up less noise. And of course, the folded dipole is more fun to build!

Folded Halfwave Dipole

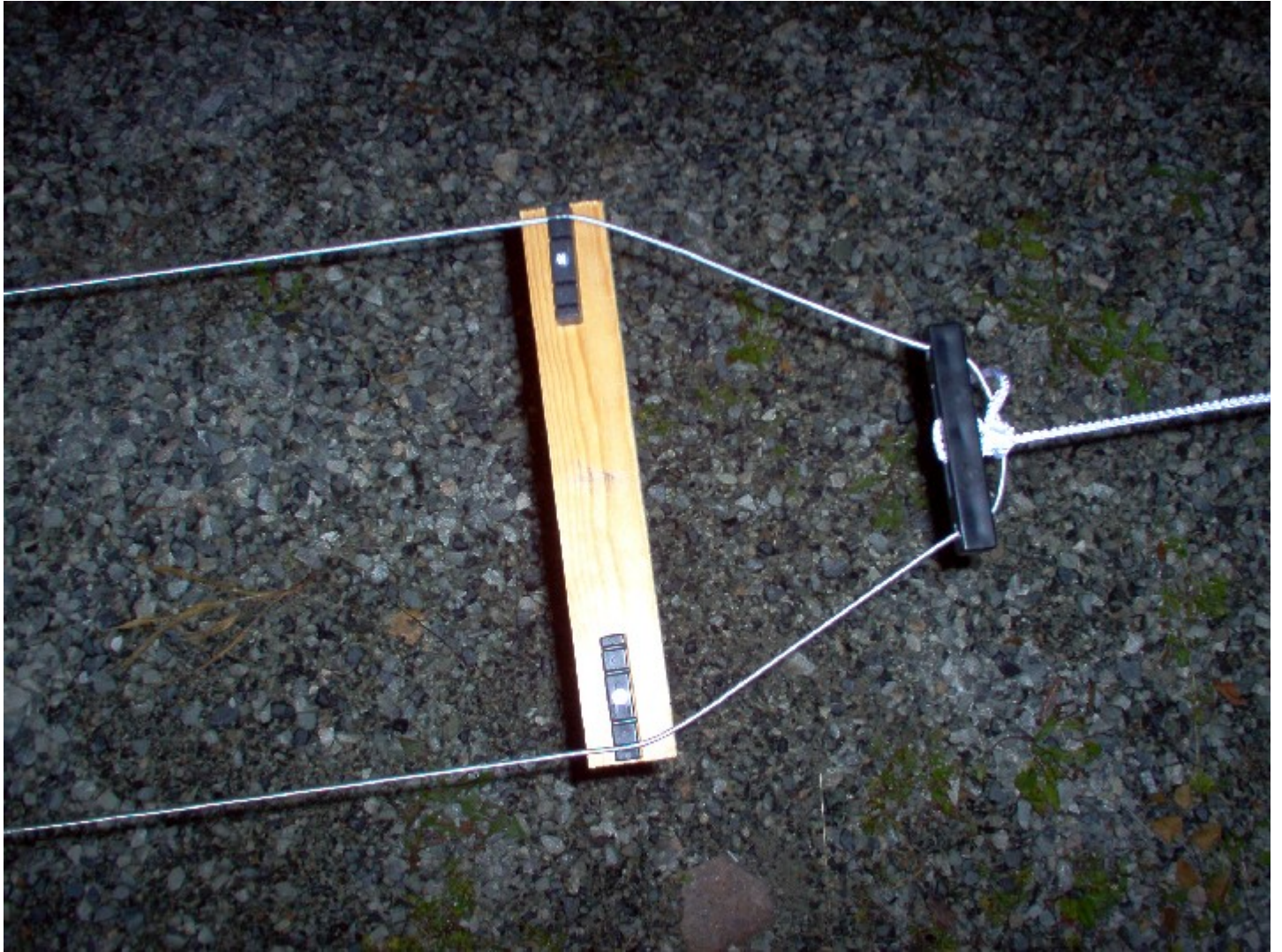


Note:

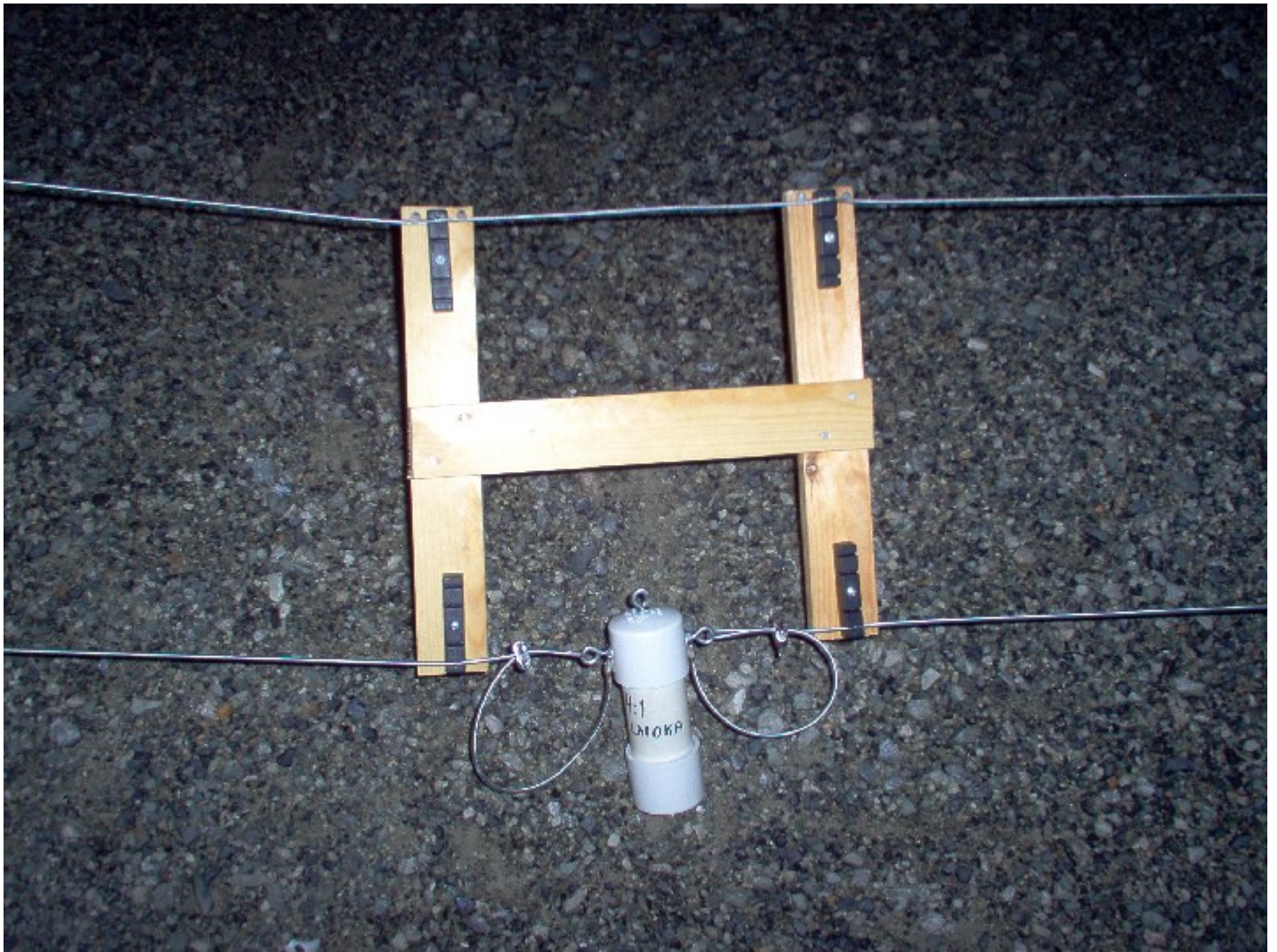
The formula given is not accurate, since the length of the Folded Dipole depends on the spacing between the wires, the wire sizes, the conductivity of the ground and the height above ground. Due to that, make the antenna slightly longer than the length given in the formula and cut the antenna for resonance.

The spacing between the wires are not critical, as long as the spacing between the wires are close together compared to the wavelength.

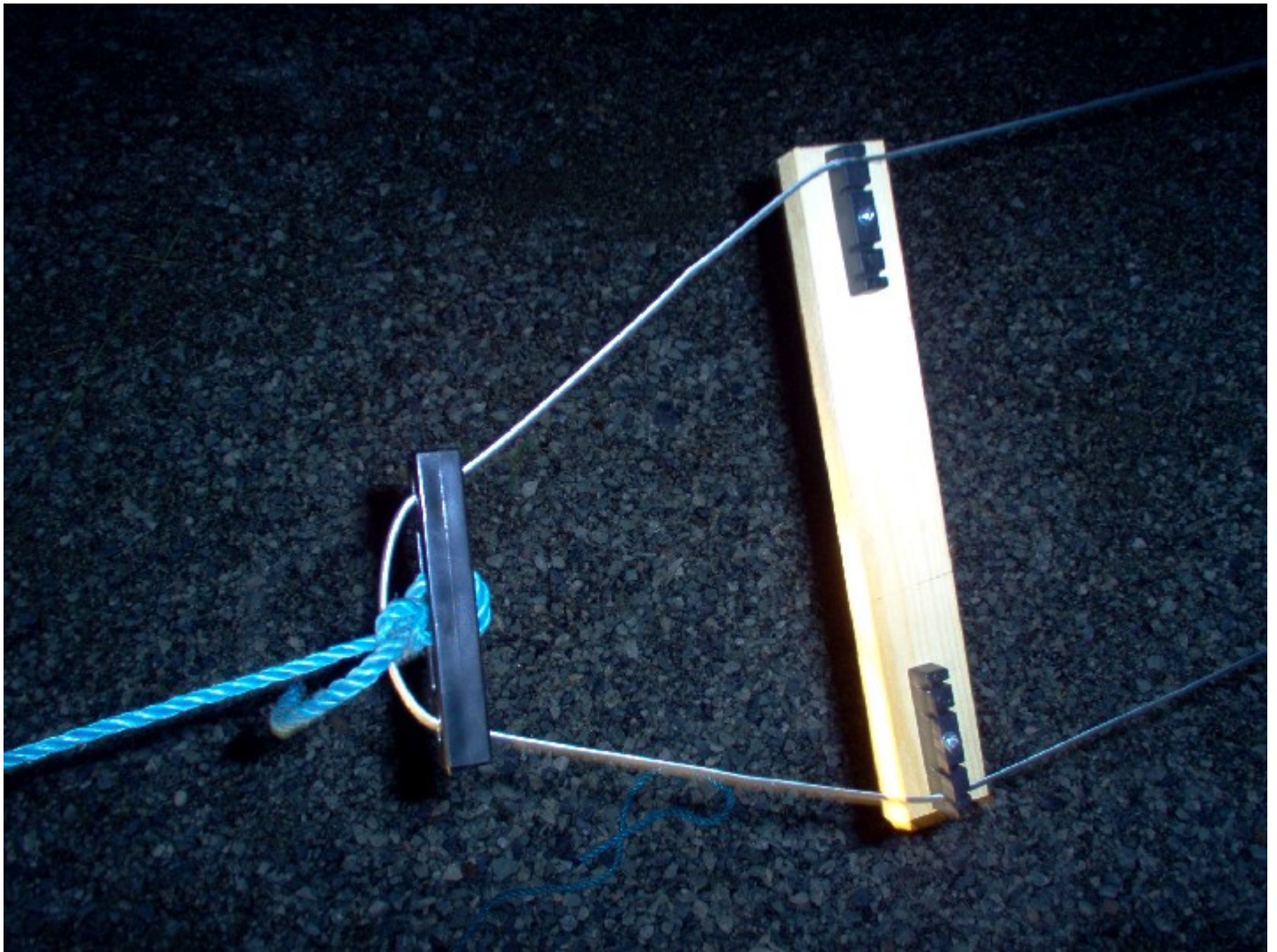
Below are some pictures showing the construction details of my folded dipole for 20 m. In my folded dipole for 20 m I ended up with a total length of 9,8 m and 28 cm between the wires.



The end isolator and the spreader. The spreader are made out of wood, with plastic isolators mounted on.



The feeding point part of the folded dipole, with the spreaders, and the 4:1 balun.



The end isolator and spreader shown from a different angle.

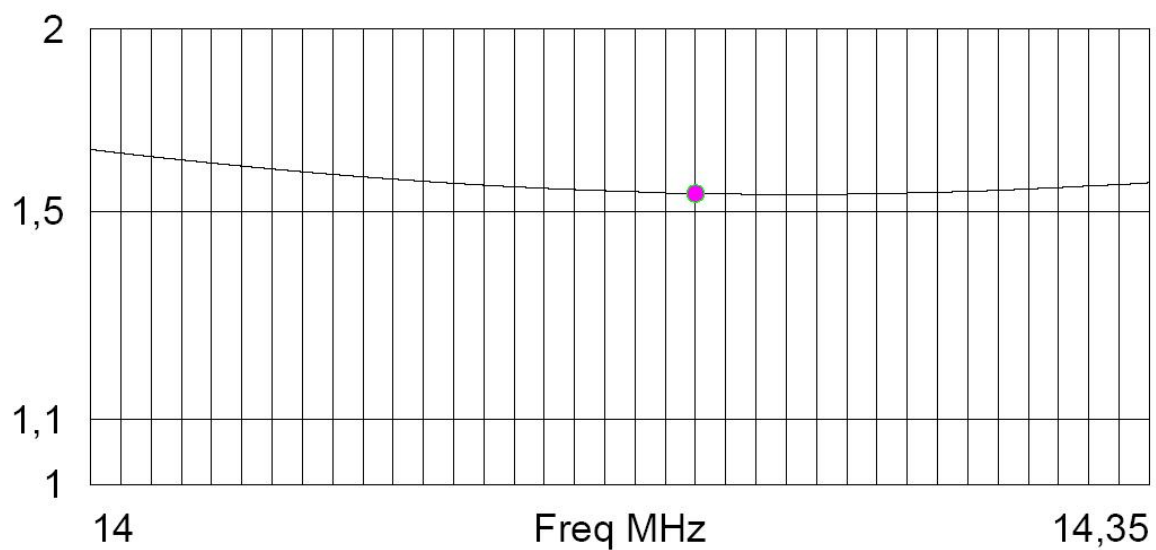


The 20 m folded dipole as a Inverted V.



The 20 m folded dipole as a Slope.

The 20 m folded dipole antenna set up in EZNEC for simulation.



20 m Foldet Dipol

Freq	14,2 MHz	Source #	1
SWR	1,54	Z0	200 ohms
Z	307,7 - j 8,915 ohms		
Refl Coeff	0,2129 at -3,72 deg.		

Results from SWR analysis done by EZNEC.