

## MULTIBAND VERTICAL FOR 160m – 10m by HB9MTN



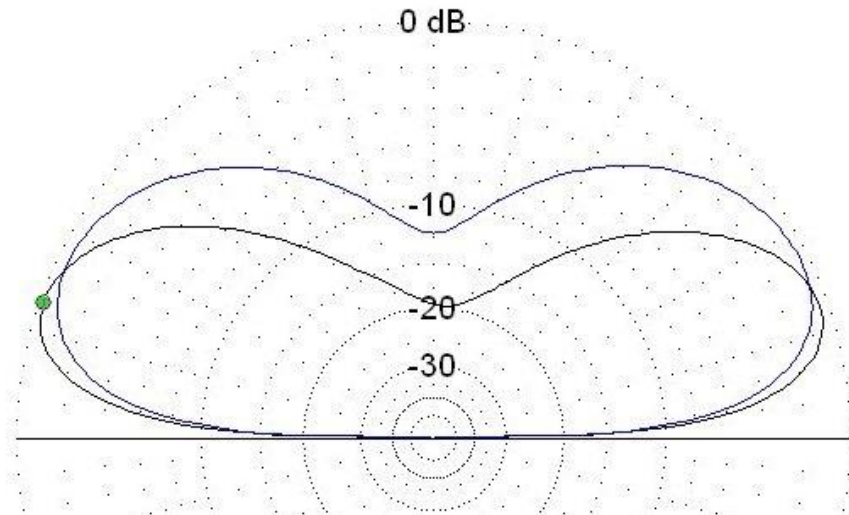
“After several attempts to build a multiband **C-Pole** I finally ended up with the Multiband H-Pole. C-Poles for different frequencies on one pole must be fed with separate feedlines over separate current baluns.

In a first attempt I fed the H-pole in the center with a ladder line. It was electrically no longer an “off-center-fed-dipole” as the **C-Pole** was, but a vertical, folded “doublet”.

The **C-Pole** is a resonant antenna, whereas the H-Pole is non resonant and must be matched with a tuner. Construction and materials used for the H-Pole are similar to the C-Pole. I use non conductive glass fibre fishing rods, beware of conductive carbon fibre!

The first results are very promising. I had contacts with excellent signal reports within a few minutes on all bands except 80m at @ 12:00 UTC in July 2008.

I used the **SG-239 Automatic Tuner** (asymmetric !). So far, the sound of the automatic tuner, was “healthy”, only a few “clicks” and down was the SWR! I connected the lower half of the H-Pole to the ground connector, the upper half to the “hot” side of the tuner output.”



**Elevation Diagrams H-Pole [black] Versus C-Pole [blue], 0.5m over MININEC-Ground, 20m-Band**

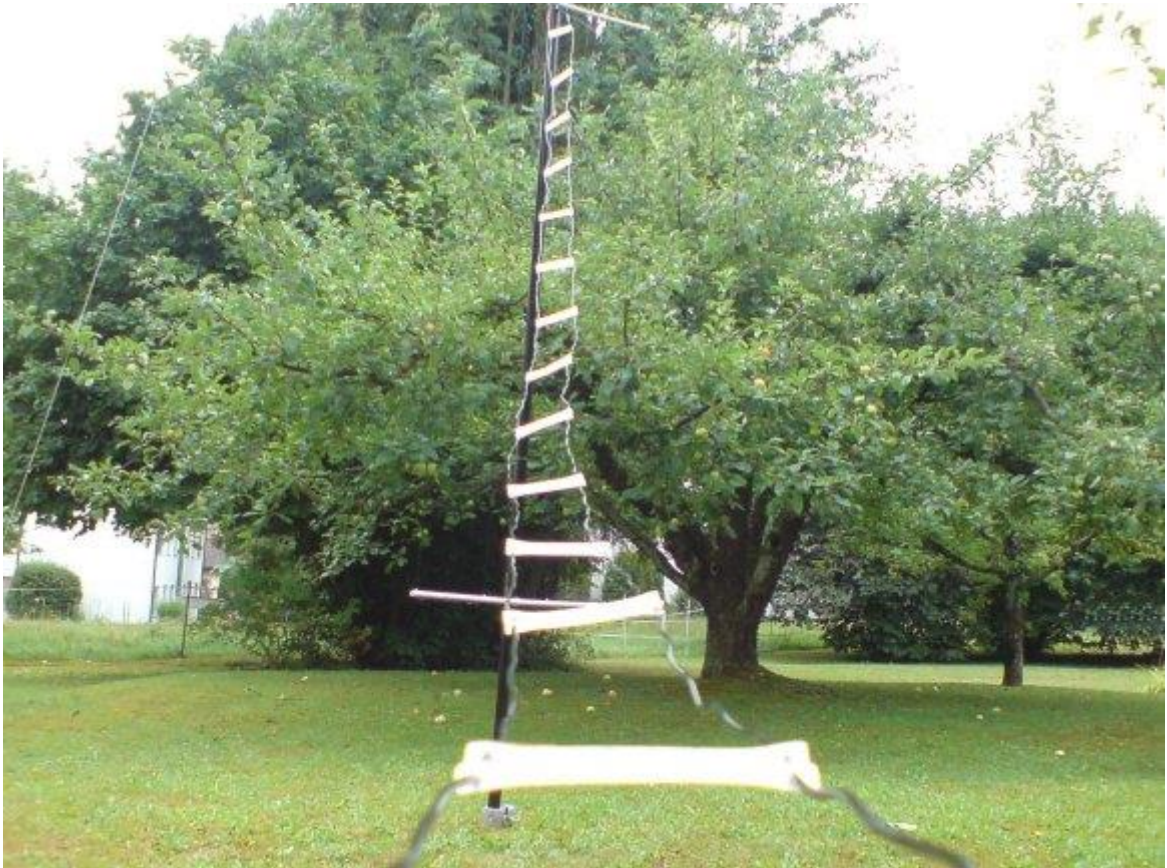
**The Azimut Diagrams for both antennas are omnidirectional**

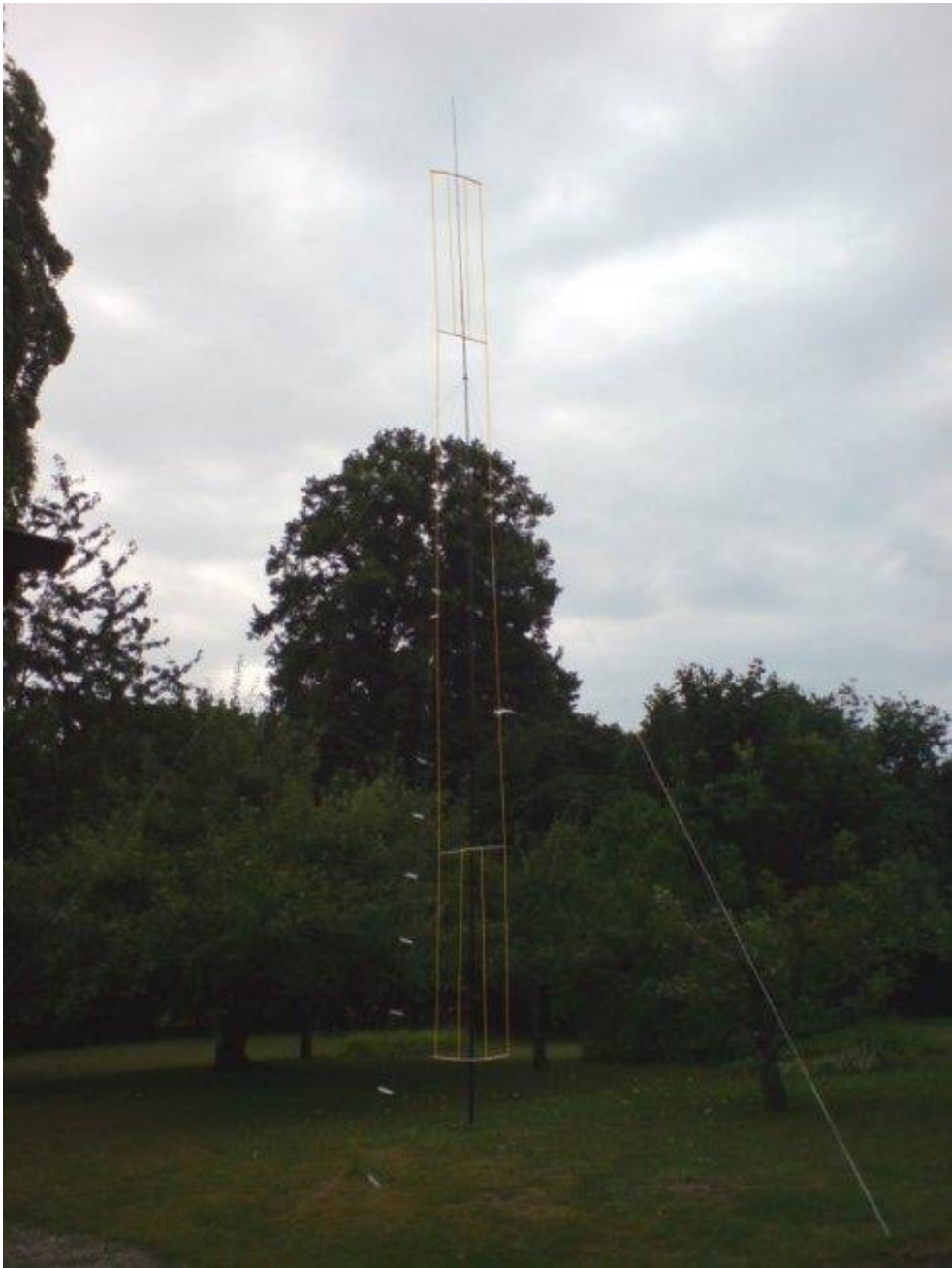
**See EZNEC-File: [multi-h-pole-tl.ez](#)**



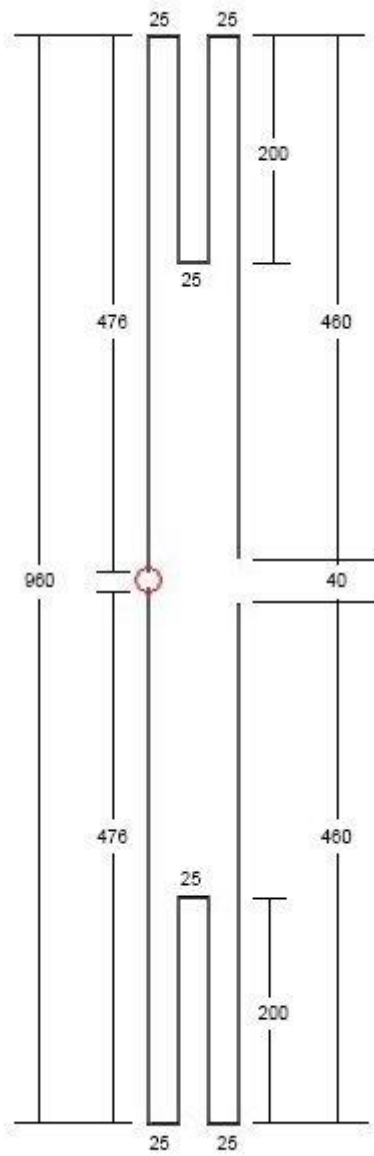








# MULTI-BAND-H-POLE



HB9MTN

See more: [http://www.qsl.net/hb9mtn/hb9mtn\\_h-pole.html](http://www.qsl.net/hb9mtn/hb9mtn_h-pole.html)