

UR5VFT Symmetrical Vertical for 7- 30- MHz

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I have installed so called Symmetrical Vertical on the roof.

Figure 1 shows design of the antenna.

The antenna was made according to recommendation of the RV3MS. Support mast was made from plastic tube in four meter length. On the mast was installed an old CB Antenna in 6.4- meter length. Antenna was installed at three meter above the concrete roof.

Three counterpoises in length of 6.4 meters were installed at the feeding end of the CB Antenna. The counterpoises as well served like guys for the plastic mast. The antenna fed by PRPPM-0.9 two wire cable. The cable is used for wired phone service in ex- USSR countries. **Photo 1** shows the cable. The cable contains two wires in diameter of 0.9- mm divided by polyethylene insulation. Distance between centers of the wires is 3.5- mm. **Photo 2** shows the antenna on the roof.



Photo 1 PRPPM cable

Note from VA3ZNW: You may found similar cable on the E- BAY and AMAZON, and of course at ham flea market.

Then feeder (any length from the PRPPM) is going to the shack. MFJ- 974HB Symmetrical tuner does match of the antenna in frequencies ranges of 7- 30- MHz.

Near feeding terminals of the antenna a symmetrical RF Choke is installed. The choke contains 17 turns wound by the feeder of the antenna (PRPPM wire). Gap between the turns 1.5-2 millimeters (defined by plastic rope placed between the turns). Diameter of the Choke may be 24- 35- mm, it is not critical. **Photo 3** shows the RF Choke.

So it is very simple antenna that may be done in low time and provide good operation from 7- 30 MHz. I am very satisfied of the operation of the antenna.

73! de UR5VFT



Photo 2 Antenna on the Roof



Photo 3 RF Choke

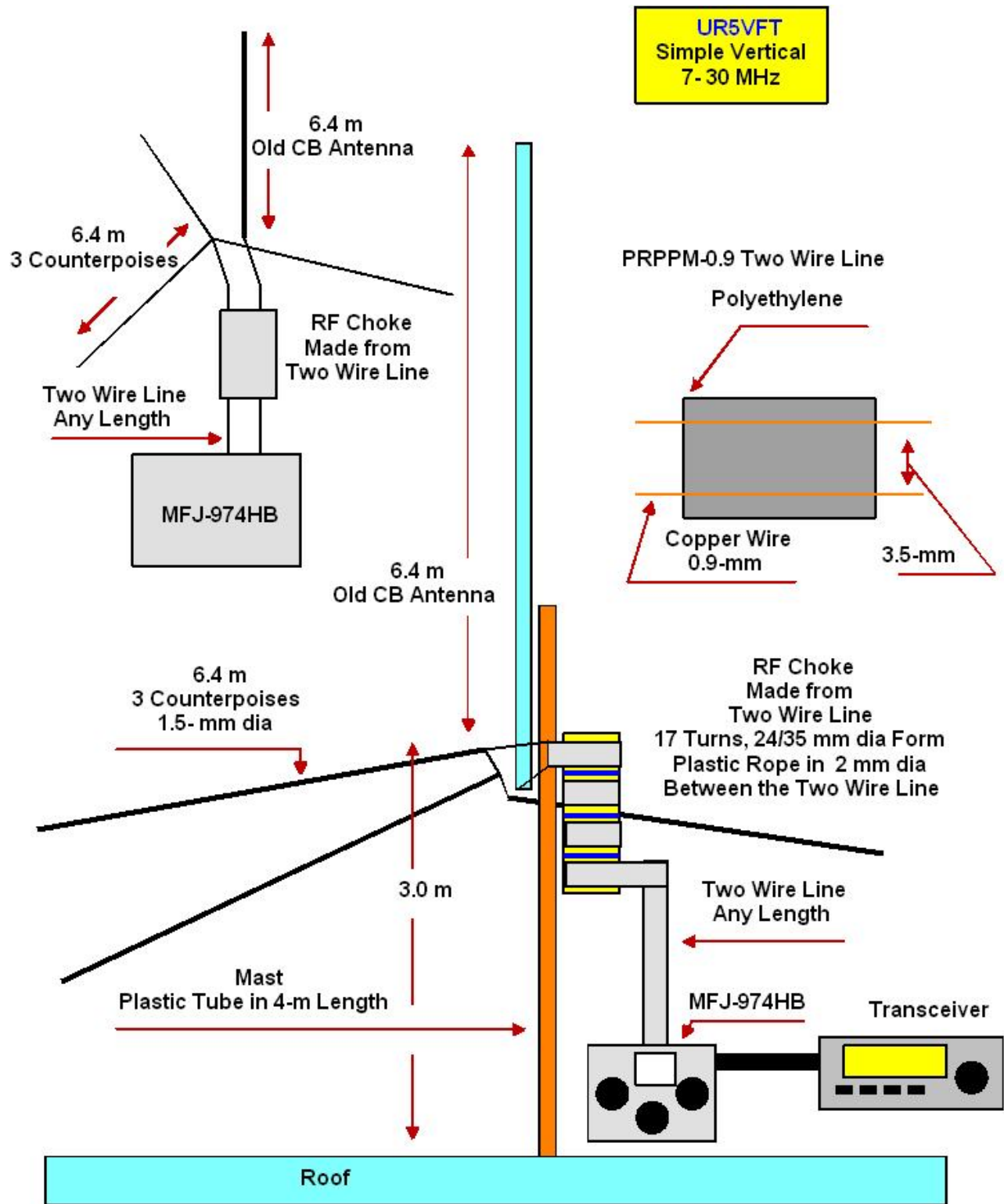


Figure 1 Design of the Symmetrical Vertical