The G3YCC 'Shorty' Dipole for 14mHz

DESCRIPTION

This mini dipole was described in Practical Wireless and Sprat recently in addition to the Five-Watter, the magazine of the Michigan QRP Club.

I first saw the idea in an old book, but this used somewhat cumbersome loading coils, and I thought it could be improved upon.

Basically, the dipole is half the size of the usual full sized versions and is therefore about the size of a ten metre dipole. Construction was fairly straight forward and uses readily available materials. Aluminium tubing of 1 inch and 0.75 inch outside diameter is used, these being the only sizes readily available to me which are a sliding fit. The loading coils are wound on 22mm PVC plumbers’ pipe, which I strengthened with varnished wood dowel. 18 turns of plastic covered single strand wire were wound side by side on the PVC and connected to the aluminium tubes at either side with self tapping screws and solder tags. Another piece of this is used at the centre of the dipole to strengthen the aerial. I hope the illustration below will show how the adjustable sections are arranged.
I used a nylon chopping board at the centre of the dipole, fastening the two elements to it using U-bolts. These are also used to connect the dipole to the mast. The end tubes are adjusted for optimum operation at the part of the band required. Tuning was done in my case with an MFJ Antenna Analyzer MFJ-259, but the other usual methods (noise bridge, GDO etc) can be employed, but, as with any aerial, it is preferable to tune in the operating position. Preliminary adjustments can be made on a short pole stuck in the garden etc. In fact, I did this when the dipole was about 4 feet from the ground. I was impressed with the performance on receive even at this low height, so much so that I called S59DBC and got a 59 report, and I was using ten watts PEP! The next day, when the dipole was up at 32 feet I managed to work through a DX IOTA pile up through to Cape Breton Island. Since then I have had many good QRP QSOs, including a two way QRP with 8P6SM, Gus in Barbados. The proof of the pudding ...

I hope this mini-dipole will be of interest, especially to those with limited space. Try it - it really works well, and do let me know how you get on.

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