The Latest

Triangle loop antenna for 2m

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The January 2023 edition of the QEX magazine includes an article about a horizontally polarized triangle antenna for the 2m HAM band. This looked to be an easy build and since I was able to work some FT8 contacts on my vertical dual band antenna a few weeks back I decided to go ahead and try the build. It started with a trip to the hardware store to purchase a 36" ruler and some nylon screws and nuts. While I was there I also picked up a 36" aluminum strip that was 1/2 inch wide and 1/16 inch thick. My thought was to test the build with two different versions.

The first step was to drill holes for the connectors and screws to attached the mounting wire etc. Then it was off to bending the metal at 60 and 120 degree angles to form a triangle open at one end. The open end are kept at a fixed distance with the nylon screw and nuts. Soldering the feed wire to the connector and the antenna is complete. The version with the small aluminum strip has an SMA connector and the version with the ruler uses an N connector, both female.

Next step was the antenna analyzer. Both version needed a bit of adjustment at the gap but that was easy to do. The analyzer showed that the resonance (low SWR) was a few MHz below the band edge. Increasing the gap 1-2mm moved the resonance up to about 144.2 MHz, right where I wanted it for FT8 operations. The SWR is around 1.2:1 and the antenna has a wide tuning area.

One of the antennas are now mounted about 5 feet above my garage and ready for testing tomorrow evening.

2m triangle antenna

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Previous 3Get Next 3

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March 2024 {1}

August 2023 {1}

May 2023 {1}

April 2023 {1}

March 2023 {1}

January 2023 {2}

Tags

10 GHz {1}

2m {2}

GNU Radio {1}

HackRF One {1}

<u>HAM {4}</u>

HF {1}

PNW Microwave {1}

X-Band {1}

Calendar

Su	Mo	Tu		We	Th	Fr
			Sa			
				1	2	3
			4			
5	6	7		8	9	10
			11			
12	13	14		15	16	17
			18			
19	20	21		22	23	24
			25			
26	27	28		29	30	31