



Squelch Tales

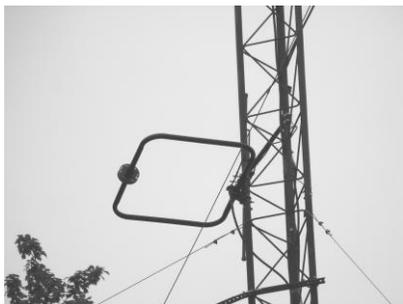


Newsletter from the Merrymeeting Amateur Radio Association for May 2011

Folding Lawn Chair 50 MHz Halo revisited

By WIZE (reprint from July 2009)

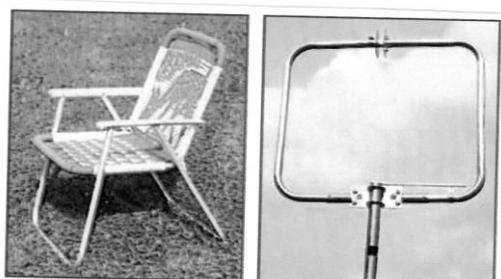
Several years ago Dick Stroud, W9SR had an article in QST titled “Six Meters from Your Easy Chair.” This article caught my eye so I made a copy of the article and put it in my Ham radio antenna computer file (a very large file).



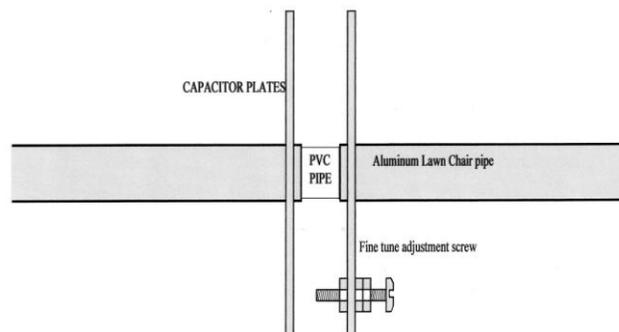
A year ago, after I got my 55-foot tower up in the air with my SteppIR Yagi on it. I thought it would be good thing to have an Omni-directional, horizontally polarized antenna for six-meters so I could keep tabs on the calling frequencies to alert me to a six-meter band openings.

A halo or squalo antenna would fit my needs. At about the same time I was about to clean out the garage and noted two old cheap Wal-Mart aluminum folding-chairs. One was a little bent out of shape and the other had it's webbing coming apart. Dick's article came to mind and they were saved from a trip to the Phippsburg recycling center and relocated to the workshop.

I made a trip to the hardware store for a small piece of aluminum sheet to fabricate the capacitor plates and a blank galvanized electrical quad box cover to be used as the mounting plate.



With hacksaw and tin-snips I went to work. A few hours of fabrication work the antenna started taking shape. After it was assembled I went into the test mode with my antenna analyzer. After some gama-match adjustments and finding a proper capacitor gap I got it resonant in the in six-meter band. What was troubling to me was the touchiness of the capacitor disc plates adjustment. I could never seem to get the SWR sweet spot at 50.125. It was either out of the band on the low side or up at the high end of the band, never a happy medium. I needed a smaller capacitor in parallel to the big disc capacitor to fine-tune the antenna.



What I settled on was a 6-32 brass screw and a few brass nuts that would act as a screwdriver adjusted capacitor mounted near the edge of one capacitor plate.

This mod worked slick. After rough tuning of the capacitor plate I could fine-tune the have the lowest SWR at 50.125. Two turns of the screw would move the sweet spot 20 kHz. After final adjustment I had 1.5:1 or less from 50.010 to 50.500 MHz, most of that range 1.1:1.

I have made dozens of QSO with it and it works very well as an Omni-directional horizontally polarized antenna.

If you would like to build a lawn chair halo and need the plans, go to the ARRL web site. If you are a member, download the following PDF file from:

www.arrl.org/members-only/tis/info/pdf/020133.pdf
73, Bruce



May Ham License Exams at Red Cross

The MARA VE team will have a license exam session coming up on Monday, May 2nd at 6:00 PM at the Mid-Coast Chapter of the American Red Cross located on the corner of 196 and Community Way, Topsham ME. If you plan to attend and take an exam please have a photo ID, current amateur radio license and cash money to take the exam. For further info about this exam contact Don Wakeman, KA1WAL at: ka1wal.dsw@gmail.com



Result for the 2010 New England QSO Party

Result for the 2010 New England QSO Party have been posted at <http://www.neqp.org> Certificates for ME stations will go into the mail this week, and plaques will be mailed the coming week. Congratulations to N1URA/KU1U for multi-single, K1ESE for the top high power, N1QLL for the top low power, and to **Steve Kerchel, AA4AK for the best QRP score!**

We hope many of you will be a participant in this year's NEQP on May 7-8, 2011. Please let us know if you'll be QRV - we're especially looking for additional mobiles! Send details to info@neqp.org.

73, Tom/K1KI



1¼-Meter Band FM in Maine

By Bruce Randall, W1ZE

Contrary to popular opinion there is ham radio life between 148 and 420 MHz. Where is this activity you may be asking, well, it is between 222 and 225 MHz and referred to as the 1¼ Meter band. And yes there is activity on that band here in Maine and throughout New England. Maybe not as much activity as in the mid Atlantic states and the West Coast but still enough to maybe check out the activity.

Back in the late 1970s in southern California when I was WA6MUP and active in the Anaheim ARA. Midland was building ham radio equipment and they had a crystal controlled FM transceiver called the 13-509 that was on the 220 to 225 MHz. To promote the radio and increase activity on that band, they made their transceivers very affordable to ham clubs if they purchased a quantity of them. That is what the Anaheim club did. They purchased 25 to 30 of them and sold them to club members to get the ball rolling. Larry O'Brian, W6LO, took one of the transceivers, split the transmitter and receiver boards and made a complete repeater that was installed along side the club's two-meter repeater in the Fullerton hills. We found out quickly that the 222 band was very useful and repeater coverage was as good as the two-meter repeater coverage. I still have my 13-509.

Several months ago Don, KQ1L approached Bill, K1MNW on Oak Hill to see if he would be willing to facilitate a 222 MHz repeater on his hill. As usual, Bill said, "why not, come on up." With

that the planning started on a 222 MHz repeater link system. Don has a 224.72 repeater up and running in Augusta and it is linked to the 224.24 repeater in Exeter. The next repeater will go up on Oak Hill later this spring and there are plans a foot to put up a forth repeater at the hill top QTH of Mark and Deb Potter W1AUX/K1AUX in Lincoln county. With the Oak Hill repeater the coverage should be extensive with good coverage down the coast to at a minimum Biddeford/Saco and hopefully beyond.

What do you need to get on the band you may also be asking? A basic 222 MHz FM transceiver will do the trick and a simple 1/4-wave ground plane antenna will do. Finding a large verity of rigs is not going to happen but Alinco, Air-Stream and the Chinese Wouxun make rigs. The Alinco DR-235MKIII is a nice mobile or fixed station 25-watt rig that is easy to program and operate and sells new for around \$275. I have one in my shack.



The Jet-stream JT220M is a 50-watt radio that sells in the neighborhood of \$240.



For those of you that do not want to invest that much in a single band transceiver but want to get on the band the Wouxun KG-UV2D dual-band (2M & 1 1/4M) Handheld may be your ticket. I have one of these and for a 5-watt HT it does the job pretty well. No, it is not a Kenwood, Icom or Yaesu but it works. It's receiver covers 130 to 170 MHz and 200 to 250MHz. The nice part is it sells for \$110 and comes with battery charger, two antennas (vhf & 222MHz), belt clip and lithium-Ion battery. For a few extra bucks you can get a speaker-microphone, programming cable and a few other options. The KG-UV2D is not an easy HT to do field programming because the operators manual loses a lot in the Chinese tech-writing department, but you can eventually figure it out. Use the programming cable, free programming software and your PC/laptop and the programming is a breeze.



There are nine 1 1/4-meter repeaters in Maine and the 224.86 repeater on Mount Washington, NH plus there will be two more coming on line in the KQ1L link system. There is increased local 223.5 MHz FM simplex activity in the mid-coast area now that more of us are getting rigs for that band. Who knows, maybe you too will get on and give the band a try.

73, Bruce, W1ZE

