



Squelch Tales



Newsletter from the Merrymeeting Amateur Radio Association for May 2014



K1GDI does show and tell on Crygenic Grain Beverage Radio

Reported by M.Turner KX1I

At the last MARA (April) meeting George Szadis, K1DGI has a new fund-raising project. Suggested asking price of \$20,000. Photo below. George called this a CRYGENIC (?), and since I could not remember, I called it a crygenic beeradio which George liked so you can use that name.



Anyway, it features:

1. Sensor to tell you how far you are to the nearest liquor store (or store with beer).
2. A handle that turns to open top to install beer.
3. Temperature sensor of contents.
4. Indicator of number of beer cans.
5. Safety sensor so that you cannot open a can inside a vehicle while you are driving.
6. Timer since last beer.
7. On/off switch, that doesn't do much.

K1PN noticed the prototype unit is not grounded. Mod 1 to follow shortly. This a must have for Field Day, If Field Day was on April first.



MS Walk, another Success Story



Harry (N1TTT), Steve (AA4AK) and John (K1JJS) Man "Net Control" coordination center

Brunswick: In April A good group of MARA & CERT volunteers provided communications and field coordination support for the 2014 MS Walk.

The MS folks want to thank each and ever one of the Ham Radio communicators that volunteered to help make the MS Walk another successful event that raised cash to help fight MS. Well Done all!



The W1ZE/6 tri-band Ground Plane antenna

By Bruce Randall, W1ZE

In late December when we left Maine for our winter QTH in the San Diego suburbs I packed my two Chinese HTs, A Wouxum KV-UV2D that covers 2 meters and the 220 MHz and my Baofeng UV-5R for 2M/70cM. At the winter QTH I have a 2M/70cM J-Pole but nothing for 220 MHz (1-1/4 Meter band).

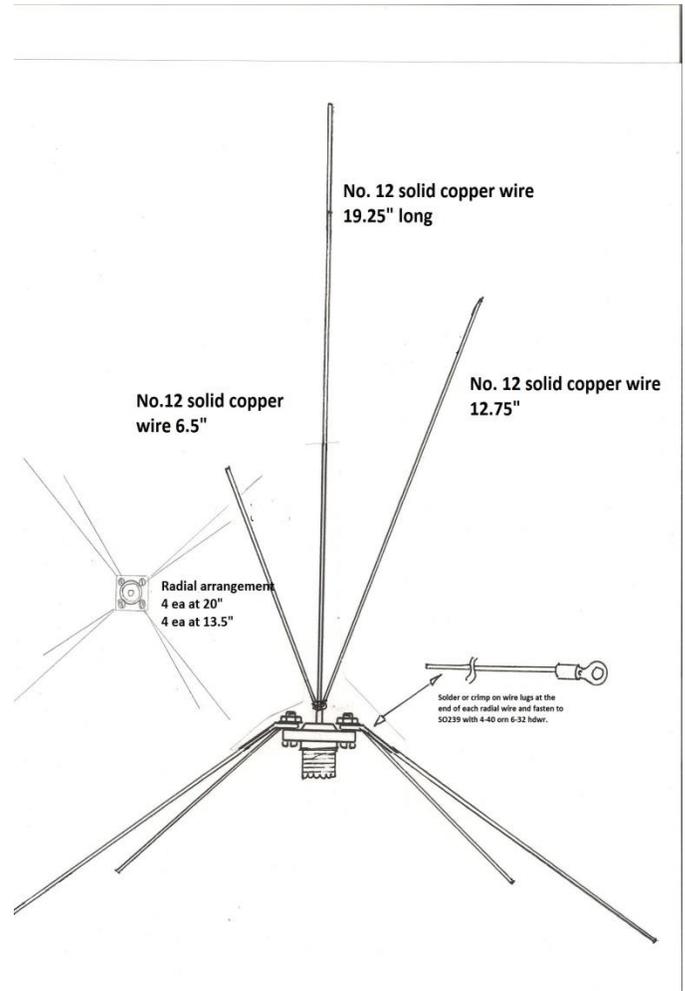
Living in a housing complex where I need very low profile antennas I thought I would just put up a simple 222 MHz ground plane, enough antenna to access that bands repeaters which are on high hills or mountain tops. I have lashed up wire GP antennas in the past with success. I have the plans to build one from AI4JI's web site www.ai4ji/projects/antennas/groundplains.htm but it was for mono-bander GPs on either 146, 220 or 440 MHz. A 220 GP would work but the Wouxon has two meters also.

If you go to your local Rat-Shack store, they sell a scanner GP antenna for VHF and UHF. Hams have noted that they work pretty well on two meters and the 440 bands with low SWR.

Taking the Radio Shack GP's dual-band functions into consideration I decided to build the two meter model and add a 222 MHz radiating element in parallel with the 19-1/4" two meter element. Using AI4JI's article I set into building the GP. After construction I got out my trusty el-cheap-o VHF/UHF SWR bridge and started checking. The SWR on 146 was darn near 1.1:1 at 146 MHz but on 223 MHz the best SWR was about 2:1. Oops, I forgot about the radials. They were cut for 146 MHz not 223 MHz. So, I added four 13.5" radials

To the existing 2 meter radials and that did the trick. 1.12:1 at 223.0 MHz.

Another thought went through my not so sharp mind, why not add a 440 MHz radiator to the 146 and 223 MHz elements. The GP had a pretty good SWR on 440 MHz but being a 3/4-wave radiator the signal wants to radiate up, not out. By adding a 6.4 inch radiator to the existing 146 MHz radiating element, that would lower the angle or radiation on 70cmeters. I did not have to add radials for 440 band because the 146 MHz radials are already a 3/4-wave resonant radials. When I checked the antenna again with the SWR bridge it was 1.1:1 at 437 MHz so I cut about an 1/8-inch off the 440 radiator and the SWR moved to 1.12:1 at 446 MHz. Good enough for me.



I attached wire lugs to the end the eight radials to make it easy to attach them to the SO-239 coax receptical. I used #10 copper wire for the two meter radiator and radial elements and #12 copper for the 440 and 220 radiators and for the 220 radials. Using AI4JI's plan the project was simple and very inexpensive.

With the antenna mounted on a four foot length of 3/4" PVC pipe on the corner of the carport I can access all the San Diego area 220 and two meter repeaters with good reports. This is a simple Saturday afternoon project you may find useful, especially if you are thinking of getting on the 220 MHz band. **73, Bruce,W1ZE**



FUNcube/AO-73 Transponder Will Be Active Each Weekend

The FUNcube/AO-73 Amateur Radio transponder will be active full time (with low-power beacon) on weekends.

FUNcube's controllers will switch to full-time transponder mode during the first suitable pass over the UK in early April, typically between 1930 and 22:30 UTC. (If this is not possible, the switch will be made on the first suitable pass on Saturday, typically between 0930 and 1200 UTC. Controllers will switch off full-time transponder mode during a suitable pass on Sunday evening, typically between 1930 and 2230 UTC. (If this is not possible, the switch will be made during the first suitable pass on Monday, typically between 0930 and 1200 UTC.



This schedule is totally reliant on the availability of command stations.

AO-73's telemetry downlink frequency is 145.935 MHz BPSK. The SSB/CW inverting transponder uplink is 435.150-

435.130 MHz LSB, and the downlink is 145.950-145.970 MHz USB. Use a maximum uplink power of 5 W into a 7 dBi gain antenna.

[More information](#) is available on the FUNcube website. Comments and user reports are [welcome](#).



Andy Hamfest was fun as usual

According to reports back from some of the MARA members that attended this year's Andy Hamfest and ARRL State Convention in Lewiston indicated that as usual there was a decent turnout and it appeared that everyone was having a good time.

George Szadis, K1GDI reported that he was a little disappointed that his Cryogenic Grain Beverage Radio did not sell and no new production orders were received. Maybe next year George will be successful.



As in past years at Andy and other the Hamfests around Maine, MARA's own, Steve Kerchel, AA4AK was there to do DXCC card checks. Thanks Steve.

The MARA's youngest member Willie Thornton, KB1UFG found a treasure at the Hamfest fleamarked and very pleased.



I think Willie's younger brother is a bit miffed he didn't find a treasure too.

New England Amateur Radio Festival XV (NEARfest)

**May 2nd & 3rd at the
Deerfield, New
Hampshire
Fairgrounds
This year's Near fest
forums are:**

- [Re: D-Star Repeater
WD2STR-B 441.4625+ will be
on the air](#)
- [Re: Near-Fest XV Jam details](#)
- [D-Star Repeater WD2STR-B
441.4625+ will be on the air](#)
- [Vendors](#)
- [Free alignment/troubleshooting
at the Fester, especially R-
390As](#)

Fore more info on NEARfest go
to: <http://www.near-fest.com:8084/nearfest/>

**We hope to see many of
you there!**

