SQUELCH



Newsletter from the Merrymeeting Amateur Radio Assoc. for July 2002

Field Day 2002 had a wet start



At 10:00 AM members of the MARA gathered at the Woolwich town museum/park to start setting up for Field Day 2002. Getting the wire antennas up in the air went smooth, but figuring out how to get the first screen tent assembled was a different story. Give an infinite amount of hams with instructions and an infinite amount of time, they will assemble all the worlds screen tents, applied to this process. In time the tent was finished and ready to go before the 1800 UTC start time.

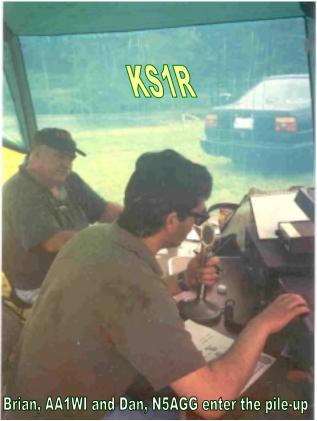
Attendance was light throughout the event, but the die-hards of N1JIM, N5AGG, W1ZE and AA1WI hung in there for most of or the entire 24 plus hour event.

We had a hand full of visitors with a special visit from ARRL New England Vice Director Mike Raisbeck, K1TWF and ARRL Maine Section Manager Bill Woodhead, N1KAT who stopped by to check out our site and wish us all well. Other MARA folks that stopped by to do a little operating or help set-up were Bob WA1ZGN, Jeff AI1B, Jerry KA1FYA and Guy KB1IJC.

Mark Rideout, N1JIM became the camp cook and whipped-up burgers and dogs for Saturday evening and Sunday lunch and a western omelet with sausage for Sunday morning breakfast. No one went home hungry.

Our final total may not be as high as previous years, but we had fun. Overall we think we did OK. We even managed to make two satellite QSOs on AO27and AO14, thanks

to AA1WI and his dual-band FM HT and portable 2M/70cM yagi. These QSOs added over 100 points to our total. Contacts were made on all the HF bands from 80 to 10 meters and one QSO on 6 meters SSB.



We think the Saturday morning damp weather kept some of the folks away from the event and other folks had prior commitments. If a few more folks had participated it would have reduced the fatigue factor that set in about noon on Sunday. Hopefully, next year more folks will join in on the fun.

Back by popular demand

Cut out and save in your wallet or car.

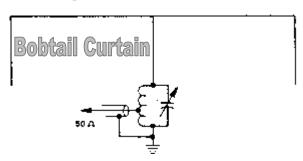
KS1R/R 2M EMERGENCY AUTODIAL #s
**0 = State Police (Gray)1-800-482-0730
**1 = State Police (Augusta)1-800-452-4664
**2 = Brunswick Emergency
**3 = Topsham Emergency729-5588
**4 = Bath Emergency443-5563
**5 = Freeport Emergency 865-4212
**6 = Lisbon Emergency
**7 = Sagadahoc Co. Emergency 443-9711
**8 = Cumberland Co. Emergency1-800-501-1111
**9 = Androscoggin Co. Emergency 882-9711

Oh no, not another wire dipole article!

Well, kind of a dipole. You may have read my previous articles on the Doublet and that I like antennas fed with balanced transmission lines (300 & 450 ohm twin lead). I use a 132-foot doublet at my QTH and make it play on all the amateur bands from 80 through 6 meters with the aid of a transmatch with balanced output. My antenna is in the classic flattop T configuration.

This past winter one halyard line separated and the antenna ended up on the ground at one end and hung up under the eve of my house at the other. To get the 132-foot span to fit in my wooded lot I had to run it close to the tower and the HF yagi. If I bent the ends down, about 20-foot each end, I could make it across the back of the property and clear of the HF yagi.

As I was sketching the arrangement out on some graph paper I noted that looking at if from the broad side it resembled a Bobtail Curtain. If you are not familiar to the Bobtail, It looks like a horizontal antenna, but electrically it is an array of vertical antennas fed at the top.

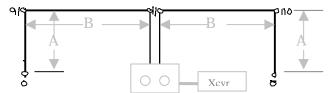


About the same time the July 2002 issue of QST hit the street with an article titled the N4GG Array on page 36. What Hal (N4GG) describes is a Bobtail that is a 3/2-wave dipole with outer ¼-wave legs hanging vertically. The end elements become two top fed ¼-wave vertical fed 180-degrees out of phase. As you can see in the above sketch the Bobtail is voltage fed against an earth ground. What Hal does is current feed the array at the center of the horizontal element, like a dipole with a 1:1 current balum and 50-ohm coax.

Hal's arrangement works well on the designed frequency and exhibit gain over a ¼-wave vertical plus can be used as a dipole on other bands. However, the coax can become a

bit lossy on other bands where a high SWR is present on the coax.

Since I was going to have to bend the ends of my doublet to fit my back yard, I used the N4GG array as a model, but replaced the coax and balum with 450-ohm twin-lead feed. Now when I an operating on bands that are not resonate I do not worry about line loss. I decided to cut my W1ZE/N4GG array for the 30-meter band with the vertical ends 23-feet long and the flat top 46-feet either side of center. The 450-ohm twin lead runs directly to the balanced terminals on my shack transmatch (antenna tuner).



Well, how did it play? It plays pretty well. On 80 and 40 meters it seems to perform just about the same as my old 132-foot doublet, but at 10.1 MHz the antenna starts acting like a Bobtail (or N4GG) array. 30-meter performance was pretty good. There was some horizontal component in the antenna, but for the most part it was a low angle radiator. I compared it against my ground mounted Butternut HF6V and the array out performed the Butternut by about 1.5 to 2 dB on DX signals.

My antenna was cut for the 30-meter band but you can make it for any band. Below are the dimensions for 80 through 20-meter models.

	A (1/4-wave)	B (1/2-wave)
80 M	66-feet	132-feet
40 M	33-feet	66-feet
30 M	23-feet	46-feet
20 M	16½-feet	33-feet

Remember, this antenna with any of the above set of dimensions will work on all the HF bands, and on some frequencies have gain over a half-wave dipole. **73, Bruce**

We appreciate your support.

Paid membership in the MARA is now at 42.

We may not be the biggest ham club, but we try and provide an active organization

More active members, more fun!

Forward this copy of this newsletter to a friend or have them check out www.gwi.net/mara

KS1R/R atop Oak Hill

Tech Committee Report

In early June the Sagadahoc County Commissioners agreed to assist the MARA in relocating the 147.21 repeater from Cole's Tower at Bowdoin College to the Oak Hill radio tower facility just a mile north of the Brunswick Freeport town line. Sagadagoc County EMA is paying the installation costs (Heliax, Connectors, antenna and work services) plus pay the monthly power bill. In return the KS1R/R repeater is now the official Sagadahoc County ARES repeater in the case of emergencies, communications training and other associated functions.

As of this writing the tower work has been completed. The antenna was installed at about 500-feet above sea level. As soon as Pete and Bruce can coordinate a good day to move the repeater, most likely after the Independence Holiday, it will be done.

When this is done we want all you users to take not on how well you hear it. If you know of a spot where the coverage was not all that good before, check that area again and see if things have improved. Let Bruce, W1ZE know what you have found. Contact him on the repeater or send a report to w1ze@gwi.net.

MARA Hams to help Bath Heritage and Independence Day Parade

There is still time to help provide communications support for the 4th of July Parade in Bath. The parade starts at 12 noon from the Bath Armory on the corner of North and Congress, works it's way down Lincoln street to the county courthouse then down Center Street to front street, up Front Street to North Street than back to the starting point.

The news media indicates this will be the biggest 4th of July parade in the state. Come bring the XYL and the kiddies, your 2-meter HT and make a day of it. Make sure you have charged batteries.

We would like everyone to check into parade control KS1R on the 147.21 repeater at least 45 minutes prior to start time (11:15 am). Hope to hear you there.

Maine leads New England in new hams!

ARRL Maine Section Manager, Bill Woodhead, N1KAT reported that he receives a round of applause at the ARRL New England Division Cabinet Meeting Saturday June 30th, because Maine led New England in the number of new licensed hams. Maine had excess of 30 new hams. Bill wanted to thank the MARA sponsored Wes Clement, N1WC VE team for their efforts in putting Maine on top.

Bill furthered stated that the day long meeting covered how the new 5 MHz band would be allocated as soon as the FCC allows the new 60-meter band in the US. He also indicated that in the future the FCC might allow NO-CODE HF privileges in the years to come. The new NO-CODE General would be limited to 25-watts of power out. Don't give up code practice just yet. The process may take years after the next World Radio Conference in Geneva. If you thing 25 watts is not much power, remember that 5-watts QRP will let you work the world with good band conditions and a good antenna.

MARA July Breakfast-Meeting will be held the last Saturday of July (27th) at 9:00 AM, Cook's Corner Denny's.

Hope to see you there!



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