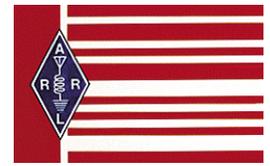




Squelch Tales



Newsletter from the Merrymeeting Amateur radio Association for October 2003

MINUTES OF THE MEETING, August 28, 2003

By Abe Galonski, KC1W



Editors Note: At the August meeting Abe Galonski volunteered to be the Associations Recording Secretary, hence the following minutes. WIZE.

Call to Order:

The August meeting of the Merry Meeting Amateur Radio Association was called to order at 7:35pm by our President Don/WD1F

Attendees:

Abe/KC1W, John/K1JJS, Bruce/W1ZE, Bob/N1VVF, Gay/N1XBN, Lee/N1HOC, Annette/KB1HNU, Bob/N1GWE, Pete/N1GEV, Mark/N1JIM, Dick/KB1HNY, Brian/AA1WI, Don/WD1F, Louise/KB1IEF, & Devin. Our Guest Speaker for the evening Ray Sirios, N1RY

Treasurer's Report:

Bob/N1GWE reports our current balance is \$1074.61, with 3 or 4 checks outstanding.

Technical Committee:

Bruce/W1ZE reports the two new transmitters for the 2-meter repeater will be delivered to Pete Russell.

In addition to the transmitter upgrade for 2-meters a 100 HZ PL tone will also be added to the output for tone squelch.

On 440 there is planned maintenance scheduled to increase the power on that machine and then link/parallel with the 1200Mhz machine. There is also a plan to move the 1200 MHz and 440 repeaters to the old tower, raising their antennas up to the 500-ft level.

Activities:

Lee/N1HOC reports both events during the month of August, the Tour of Merrymeeting Bay on August 9th, and the Dan Michaud on August 23rd, were a huge success. Lee wishes to thank all the operators that turned out to help and provide communications support to the rides.

The next scheduled event is the Tour de Farms V, taking place on Sunday, September 14th. Several operators will also be needed for that event. It is a 100-mile ride, followed by a post-tour barbecue. For the most part communications will take

place on the MARA repeater, and Lee will be contacting Lincoln County club for clearance to use their repeater as a backup if necessary and invite their members to participate. Operators will be needed starting around 7:00 am that day and Lee will be putting out more info as we get closer to the 14th.

Old Business:

Mark's N1JIM-L Echo-Link is now on 147.240 simplex from his QTH in Bowdoinham. WD1F was able to access the link from the West Bath FireHouse with his HT. MARA is assisting in the move by providing funding for 100 feet of coax for the new location. Mark/N1JIM is donating \$50.00 from the sale of a 6-meter HT to the club to help offset the cost of the coax.

New Business:

It has come to the attention of the club that a fellow ham, Harland Alexander, also known as Alex/N1FLX, was currently residing at Amenity Manor in Topsham. Alex isn't able to get around much at this time and sure enjoys talking about amateur radio.

A couple of MARA's members have stopped by to visit with Alex. A motion was made by Bruce/W1ZE and seconded by John/K1JJS to make Alex a life member of MARA. The motion passed unanimously. Alex will be put on the mailing list for our monthly newsletter and members are encouraged to stop by for a visit if possible.

Annette/KB1HNU raised the question about the possibility of MARA sponsoring a hamfest. It was discussed that the possibility had been raised in the past, but to date it had not happened. A motion was made by Abe/KC1W and seconded by Bruce/W1ZE, for Annette to head a committee to investigate the possibility of MARA sponsoring a hamfest next year, research possible dates, the possibility of doing it jointly with the Growtown repeater group, etc., then report back to the membership at the September meeting.

Program:

The Amateur Auxiliary, presented by the Official Observer Coordinator for Maine, Ray Sirois/N1RY. The program explained the origin of the Auxiliary, its purpose in self-regulation

and self-administration, and how Official Observers and Local Interference Committees function. Currently within MARA, problems with interference and other technical issues are addressed by MARA's technical committee. Ray has encouraged the club to form an official Local Interference Committee and provided Don/WD1F with a copy of The ARRL's Training Guide, The Amateur Auxiliary to the FCC. Members wishing to get involved with a MARA Local Interference Committee can contact Don/WD1F. For additional information on the Amateur Auxiliary program Ray can be contacted at n1ry@arrl.net.

Following the program we were treated to a short video featuring Walter Cronkite, KB2GSD titled *Amateur Radio Today*. Walter highlighted what amateur radio was and spotlighted several of our public service missions including communications support for wildfires, hurricanes, tornadoes, earth-quakes, the 9-11 terrorist attack and communications with the space shuttle for educational purposes.

Next Meeting:

Will be September 25th, 7:30pm at the West Bath FireHouse.

Adjournment:

The meeting ended at 9:00pm

MARA shines at mid-coast bike rides



The month of August and September had the MARA's public service event support team providing 2-way radio communications and field support for the Brunswick Regatta, Dan Michoud Century and Tour Des Farms mid-coast area bike rides.

The three event organizers were overjoyed with the MARA team supports skill and professionalism and wants the MARA back next year to continue making their events a success.

Many thanks to all the folks that took part, and to Lee, N1HOC for her super job as event coordinator, making it all come off without a hitch. Kudos to all the volunteers!



160 meter Inverted-L Wire Antenna

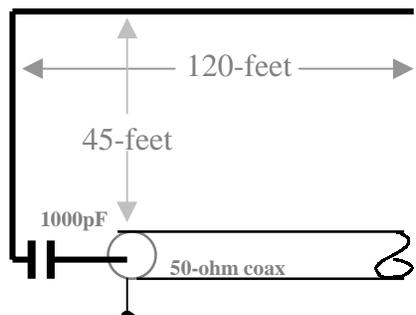
By Greg Weinfurter AEE BSS
NS8O

Electronic Design Specialist
Ohio University, Athens, USA

One of the problems with short, low antennas on 160 meters is that they're input impedance is very low, usually on the order of a few ohms. A clever trick to overcome this is to intentionally make the antenna too long. This will make the resistance increase, but also add inductive impedance. Simply add a series variable capacitor to tune it out.

I use an "L" shaped antenna on 160 and have had very good results. It is a total of 165 feet long and shows an impedance of 50 ohms+j88. It is not necessary to know any math or have an expensive impedance bridge to use this antenna. Just make the capacitance variable and you'll be in the ballpark.

Adjust with a SWR meter, cut and try adding or subtracting the length. It's not critical at all. The horizontal part can be routed just about anywhere. Try to make the vertical part as high as possible.



For the ground I've tied everything together, furnace ducts, ground rods, house ground, dogs chain (just kidding!), and radial system, with braid from RG8/U.

Does it work? You bet!! 49 States on CW including Hawaii, and just about that many on SSB with only 100w output. ALSO..... I feed it with a tuner as a long wire and with QRP I've worked both coasts. On the higher bands the capacitor's impedance is so low it makes practically no difference if you leave in or take it out.

Good Luck and CU on 160
73 de NS8O

Editors Note:

This type of antenna has been employed by one of Maine's 160M big guns John Doyle, K1GUN in Woolwich. 73. W1ZE

Oak Hill

Happenings

On Saturday afternoon, September the 6th, after the Windsor Hamfest, Bill (K1MNW), Bruce (W1ZE) and Don (WD1F) headed for the

hill and start on some of the upgrades announced at the MARA meetings and in previous newsletters.

Don brought up some new high-current snap-in blocks power strips and they were mounted in the back of the repeater equipment rack to eliminate the power connection rats-nest.

The following morning Bill and Bruce started the process of replacing the old GE transmitter with a 40-watt Aerotron. The plan was to use the transmit crystal in the GE in the Aerotron. The swap was made and the transmitter did transmit 42-watts of power, but getting the crystal to tune to 147.210 MHz was unsuccessful. Bill could not get any closer than 1.5 kHz from the operating frequency.

That project was put on hold until we ordered a new 147.21 MHz crystal cut for the Aerotron's crystal oscillator circuit. The GE got it's old crystal back and was put back into service.

Before working on the transmitter, Bill noted that the 2-meter repeaters Super Stationmaster antenna had a SWR in excess of 2:1, a far different reading than the 1.1:1 SWR we obtained a few months earlier.

Dan (N5AGG) came up to the hill to help and he went up the tower to check out the PL-259/SO-239 coaxial antenna junction and clean up the connectors. The PL259 center pin appeared to be loose in the antenna receptacle and upon further inspection, Dan thought that one of the compression tangs in the antenna's SO-239 had broken off. This could cause an SWR problem. More things to fix. The 2-meter 4-pole antenna was then checked and its SWR was 1.1:1.

A few days later Don, WD1F joined Bruce, W1ZE and Bill, K1MNW on the hill and took down the Stationmaster. The three disassembled the antenna and discovered that there was an excessive amount of moisture inside the antenna. It appeared that rainwater had wicked through the top of the antenna where the end of the collinear elements goes through the top cap. The moisture collected in the tube sponge material separators and this alone could de-tune the collinear element. The antenna section and the fiberglass radome were placed in the blockhouse to dry out for several days.

On Sunday September 21st Bruce and Bill got the r Stationmaster reassembled

and tested. SWR measurements showed 30 watts forward with only 400mW reflected. Later the following week Don and Bill got the antenna back up the tower and reconnected to the repeater.

KS1R 1.2 GHz repeater gets coordinated

On September 20th Bruce received a conformation letter from the Louis Collins, W1GXT, New England Spectrum Management council, 902 to 2300 MHz Coordinator, letting us know that our 1.2 GHz repeater has received coordination. Lou pointed out that our repeater's input frequency is in the Satellite up-link, experimentation and ATV simplex portion of the band 1260 to 1270 MHz. We are not required to move the frequency however after consideration the technical committee thinks it would be a good idea to move the repeater from 20MHz split of 1284.0/1264.0 to a 12 MHz split of

1284.0/1272.0 MHz which moves the repeater input above 1270 MHz.

On another note, Bruce/W1ZE, KS1R trustee sent in the coordination paperwork for the 147.21 and 444.4 repeaters in early September. They had to be re-coordinated because of the repeater move from Cole's Tower at Bowdoin College to Oak Hill, a distance of several miles and increased antenna height of several hundred feet.

First Aid Training for MARA a possibility



At the Windsor hamfest, Sagadahoc County EC, DR Allen Kwong, WA1SCS and Sagadahoc County AEC Bruce, W1ZE were having a chat and admiring the trail bike Allen found at the ham radio fleamarket. This conversation led to the subject of how well the two August bike ride

events came off with one of our members providing first aid to one of the bike riders in the Dan Michoud Century ride.

Allen suggested that it would be a good thing if our MARA members had basic first aid training and Bruce hartetly agreed. Allen said he would see what he could do to set up a class, most likely at Mid Coast Hospital and maybe incorporate it with the monthly MARA meetings.

Stay tuned for further information on this possibility. As a footnote, Southern Maine EC Bryce, K1GAX, Sag. County EC Alen, WA1SCS and AEC's Lee, N1HOC and Bruce, W1ZE will have an informal Cumberland and Sagadahoc county ARES coordinating meeting on October 16th. If any of you would like to join them at the Cook's Corner Dennie's, let Lee know

Web Site for the QRP kit builder

By W1ZE

In the October issue of CQ magazine (pp.34) there is an article on a mini QRP HF transceiver kit called the Rock-Mite by a company called Small Wonder Labs. The kit costs \$25 bucks. That is a good price considering you would have to mail order all the board components and I am sure they would be more than \$25 after shipping.

Since I have always had a fondness for kits and QRP I went to the company web site and spent the better part of 20 minutes looking at all the kits available for very reasonable prices. They offer the Warbler kit, an 80-meter 1Watt PSK31 QRP transceiver that connects to your PC to make a nice dedicated PSK31 set-up.

If you are like me and want to check out this site, go to:

www.smallwonderlabs.com

Bill on the Hill starting to roll on ATV

As if he doesn't have enough to do, Bill Messier, K1MNW has ordered up the transmitter, brick power amplifier and down-converter kits to get a basic ATV station up and running on the hill. This is a preliminary move to see if Bill and the MARA can drum up interest in ATV and if so put a 430 MHz ATV repeater up on Oak Hill. Bill will discuss this project at the September MARA meeting.

Officers of the MARA

President = Don Dauphin, WD1F
V.President = Jeff Herbster, AI1B
Secretary = Abe Galonski, KC1W
Treasurer = Bob Watson, N1GWE
BoD = Louise Dauphin, KB1IEF
BoD = Lee Tribou, N1HOC
KS1R Trustee = Bruce Randall, W1ZE

Technical committee:

Bill Messier, K1MNW
Pete Russell, K1MJP
Don Dauphin, WD1F
Bruce Randall, W1ZE

Newsletter Editor:

Bruce Randall, W1ZE