



## ***Next Meeting***

Wednesday, November 8, 7:30 pm, Lunenburg Library.

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### Contributors To This Issue:

AB1GF, K1JHC, KB1LRL, KD1YH, KT1I, NZ1D

## ***The President's Corner***

*de Tom, AB1GF*

Well that went by quick; it's November already. I am just about settled after what I feel was a successful JOTA. I want to thank NVARC from Pepperell and the Mohawk group from Gardner for teaming up with us for this year's event. We set up at the Nashua Valley Boy Scout Council office in Lancaster. The weather was perfect and we were able to show local scouts and leaders what ham radio is all about. The excitement was high and participation was good. I was impressed with how well everything went.

NVARC brought their tower trailer and A3S tribander. Gardner brought their communications trailer. We had a good choice of things to do. DMR radio, Echolink and HF. We even had a fox hunt, or what I called find the downed airplane. Stan, KD1LE, showed them how to triangulate the signal and salvage the "black box". Their fox finder worked great. Charlie, KT1I, brought some QRP equipment and showed that it doesn't take much power to communicate.

Kevin, N1ERS, and the Mohawk group showed some DMR and HF radios. We had CW on display also. That was a lot of fun. The scouts were able to learn how to send their names in Morse code. I even supported the scouts by purchasing some popcorn which Ray helped me carry out, Hi. I also made notes on some improvements for next time. Again, thanks to all for a successful event.

## **October Meeting Report**

*de Barry Fox W1HFN, MARA Secretary; with input from Gordon N1MGO treasurer*

The October meeting was called to order at 7:30PM. Those in attendance were: Tom-AB1GF, Gordon-N1MGO, Ray-KB1LRL, Paul-KD1YH, Tom-K1JHC, Charlie-KT1I, Gary-K1YTS, John-KK1X, Paul-N1QDX, Tim-W0TJP, Eric-W1QED, new member KC1IFM-Jill and Barry-W1HFN.

Introductions were made with name and call sign. The secretary moved to have the previous month's meeting minutes be accepted as printed in the newsletter. Seconded and passed. Treasurer's report, ending balance of \$2879.93. Motion to accept, seconded and passed.

JOTA is coming up, MARA, Mohawk and Nashoba are all participating at the BSA HQ in Lancaster.

Paul-KD1YH, states that the new repeater controller has had a software upgrade. It has yet to be connected to any repeater. New feed-line (250 feet of LDF450A) is to be purchased for future install. The vendor is in Montana, so shipping costs could be high.

Tom asked if anyone had any club property to please notify him with details.

Tim-W0TJP mentioned that the Head of the Charles Regatta is up-coming and more amateurs are need. It is a major event in the rowing world and promises to be a fun day. Also the Bay State Marathon in Lowell needs ham support as well.

A request was made for more stations to act as net control for our Sunday 2M FM net. As Ray often says, "it's not rocket science".

There was a 15 minute coffee break at 8:00 followed by a video presentation by Eric-W1QED of ham radio operation aboard the International Space Station, NA1SS.

The meeting was adjourned at 8:48

Respectfully submitted, Barry-W1HFN, Secretary

## **State of the Repeaters**

*de Tom AB1GF, Paul KD1YH*

Information on the repeaters is in the October Meeting Minutes above.

## **The Old Timers' Lunch**

*de Tom K1JHC*

The Old Timers' lunch crowd was small this month, only Charlie KT1I and myself, K1JHC. It seems that all are not free and lazy as we are, as they have work or family concerns that keep them away. The "guesstimates" at the weather bureau say the frost is two weeks late and gardening must be attended to *[that means if it's rainy and cold it's time for antenna work, Ed.]* Young or old, all are welcome at the Airport Diner on the first Wednesday. Come out and enjoy a good lunch and some friendly chatter.

## **Sunday Net Control operators needed**

*de Ray KB1LRL*

We still need two (or more) people to serve as Net Control for the Sunday morning ARES net. This is great practice for operating in special events as well as emergency situations. Participation will be on an as needed basis but you will be guaranteed a slot so you can learn about this function. Just need one-half hour on Sunday. There are times when someone cannot do their turn. I will give up my time in favor of giving that person the experience. Give it a try!

*[Please drop Ray an email if you're interested, Ed.]*

## **Contesting/Operating**

*[See the ARRL Contest Calendar for more contesting information. For in-depth reporting on Amateur Radio contesting, you can subscribe to The ARRL Contest Update via your ARRL member profile e-mail preferences, Ed.]*

## **Ham Radio Clubs Bring JOTA to Local Scouts**

*de Ray, KB1LRL*

On September 21<sup>st</sup> at 7am, three radio clubs converged at the district Boy Scouts headquarters in Lancaster Ma to introduce amateur radio to the local scouts for the 60<sup>th</sup> annual JOTA event. The Scouts along with their parents and other leaders were given a lively demonstration of some of the many facets of Ham Radio.

The three clubs participating were the Montachusett ARA from Lunenburg, Nashoba Valley ARC from Pepperell, and the Mohawk ARA from Gardner. Mohawk brought their communications trailer, NVARC provided their tower trailer and MARA brought radios and supporting gear.

The scouts were treated to many aspects of radio including QRP kit radios, SSB, DMR, Morse code and phonetics, and Echolink. The scouts had the opportunity to make contacts with other JOTA event stations across the country.

The biggest hit was the Foxhunt demonstration where the Scouts enjoyed the warm weather and attempted to locate the transmitter using triangulation. Stan Pozerski, KD1LE, along with Skip Youngberg, K1NKR, created "Thinking Day on the Air" events for the Girl Scouts (<http://n1nc.org/Events/2017/GSTDOTA/article>) and brought their expertise in enhancing this event. They also set up tables with practice keyers and Morse code sheets and coached the Scouts on the code as well as phonetics. Kevin Erickson, N1ERS, and his Mohawk group brought their utility trailer nicely set up for in-the-field operation and gave the kids a great SSB demonstration.

This was MARA's second participation in the JOTA event and it saw an increase in participation by both Scouts and volunteers. MARA extends great appreciation to all the clubs and the volunteers for such a successful event and looks forward to a bigger and better one next year.



*Illustration 1: All set up at Nashua Valley Council BSA HQ and ready to make some Q's!*



*Illustration 2: That looks like a nice level spot for NVARC's tower*



*Illustration 3: Scouts line up to learn the basics of Morse code sending from Stan, KD1LE*



*Illustration 4: Scouts also learn how to communicate with a microphone*

*[Due to the large number of pictures of this year's JOTA event, I have issued a special JOTA feature section of the W1/GaZette entitled "Ham Radio Clubs Bring JOTA to Local Scouts", Ed.]*

## Charlie's QRP and CW Ramblings

de Charlie, KT1I

*[Since Charlie brought his latest toy, a tiny QRP transceiver called Cricket to the JOTA event, I thought the membership might be interested also. Here is Charlie's story, Ed.]*

I was interested in getting back on good old CW in some fashion. I have an Elecraft K1 which does CW on four bands in fine fashion and has many of the features that most modern rigs have. This article is about a much more basic transceiver that I have recently acquired called the Cricket. I was reading an article in CQ Magazine about the four state QRP group, 4sqr.com. They put out a selection of kits aimed at QRP operation and one of their latest is the Cricket by David Cripe NM0S. More detailed information and pictures can be found on their Cricket page.

I ordered the Cricket and it took just a couple of hours to put it together and it works. It's very basic, runs on a 9V battery and has its own built-in key; you just add antenna and headphones. It also has a provision to attach an external keyer; I'm working on that. It puts out about 500 mw on 3579 khz. So far, I have made contacts in MA, CT and ME. I have not made a Cricket to Cricket contact but that's coming. If anyone wants to try out some slow speed CW, contact me, [kt1i@arrl.net](mailto:kt1i@arrl.net), and we'll set up a sked. More next month; 72 Charlie KT1I.



*Illustration 5: 500 mw on 80 meters; KT1I's Cricket QRP Transceiver*

## VE Sessions

de Paul, KD1YH

In October we had one General upgrade Extra.

As a reminder, the MARA VE Team schedules license exam sessions monthly on the 4th Wednesday. Pre-registration is requested, contact Paul KD1YH [kd1yh@arrl.net](mailto:kd1yh@arrl.net). Sessions will be canceled if no one

has registered by Sunday before the scheduled session. If the session is not canceled, walk-ins are welcome, so if you are interested in upgrading or know someone who is looking for an exam session, you may contact Paul at the last minute to see if the session is being held.

### ***I'm not a Fly Fisherman...or you don't need to spend your kids' inheritance on antennas.***

*de Bill, NZ1D*

What's fly fishing got to do with antennas and ham radio? Well, my father was a fly fisherman and a darn good one. He fished all over the eastern US, Canada, and the "bush" in Alaska. He made his own lures, tied and sold flies, built and maintained fly rods, and had a TV program on a local NH station about fishing. He was what I considered a purist.

There are fishing purists and there are antenna purists. I was not a fly fishing purist, neither am I an antenna purist. Antenna guru Kurt N. Sterba wrote in *Aerials II*, describing a dipole antenna made from two shopping carts and a Budwig connector, "*Yes, if you can get power into metal, it will radiate. It will then spray off into the ionosphere.*" Or as my father would have said, "Anyone can catch a fish with a worm."

In my defense, I live in the "mature" part of a deed restricted community that (on paper) doesn't allow outside aluminum or wire structures for transmitting or receiving radio signals. Thankfully, because of the proliferation of satellite TV, some of the restrictions have been relaxed (i.e., dishes/antennas are allowed as long as they are in the back yard not obtrusively visible from the street). In my development, the "deed police" have no authority to act unless a neighbor complains.

Unfortunately, the "postage-stamp" lots here in Florida, with back yards typically only about 60 ft wide and 25 ft from the house to the rear lot line, don't leave much room for wires. With limited space, my lone HF antenna consists of a home brew 51-ft center-fed dipole, fed with a 17 ft section of 300-ohm balanced line and a short run of 50-ohm RG-58 thru a choke balun (6 turns of coax about 4" diameter wound on the base of a 2-liter plastic soda bottle). Today's amateurs will be familiar with this design as a half-size G5RV, the so-called "G5RV, Jr."

Call it what you will, a rose is still a rose. This rose is just the classic center-fed multiband dipole fed with low-loss balanced line and a short run of coax for convenience. Real old-timers would call it an adaptation of the Collins multiband idea of the 1930's. I could have run the twin-lead all the way to the rig ala Collins but my house has aluminum siding and window frames, so it required a coax "pass thru".

The antenna loads reasonably well and is usable on CW without a tuner on 40, 20, and 10 meters. The worst-case unmatched SWR is at the low end of 40, where it is 4:1 (loss of just under 2 dB). On CW my solid state transmitter doesn't mind. The total feedline loss is less than 1 dB (about the width of the needle on an analog S-meter!). If I use my tuner, it is essentially "flat".

So, why this story? Recently the power company needed to replace a 7.2KV power distribution box in my back yard. The box sits on a slab and connects to underground power cables. The transformer cooling oil had leaked out into the ground so the unit had to be replaced and the oil-soaked soil removed and replaced with new soil and turf. To provide passage for a contractor's Bobcat, the north leg of the inverted Vee had to be removed. I dropped the telescoping center-pole, coiled up the excess wire and pulled the antenna back up to take the slack out of the remaining leg. I got busy and forgot about it.

Later that evening, while lazily surfing the low end of 40, I heard PV8ADI calling CQ. He was S-9 or better so I gave him a call and he came right back with "599." The next morning I realized that my

antenna was still partly down. What I had was a roughly 33 ft off-center-fed dipole, fed with a section of low-loss twin-lead. The tuner (by accident!) was not in the circuit. Power "in" to the coax end: about 30 watts. I didn't notice the SWR. Holy return loss! I had worked Brazil (4400 miles) on roughly half an antenna! Well, as crusty old Kurt says in *Antennas II*, "Half an antenna, half a signal....Half power means a loss of 3 dB. Big Whoopie." To the receiving station: half an S-unit. Maybe my 599 report should have been 5-8 and a half!

*In Don Juan*, Cervantes wrote, "The proof of the pudding is in the eating." Common practice says that a dipole at least one-quarter wavelength long at the lowest frequency will work. That's 33 ft for 40 meters and means a 20 meter wire will work on 40 and a 40 meter wire will work on 80.

You never know what might work until you try it. In *The Easy Way*, the late John Haerle, WB5IIR, writing about antennas of non-resonant length said, "Quit worrying about them.... You don't have to worry about antennas of non-resonant length. You just need a resonant antenna SYSTEM, consisting of antenna, feedline and a matching device." That is to say, you can make contacts with less than a "fly fisherman's" antenna if you can resonate the antenna system as a whole. With simple antennas, you may never be a big gun, you may never be number one in contesting, and you may never appear in the annals of DX-ing, but you will make contacts and you will have fun in the process. Thoreau wrote, "Some men fish their entire lives without realizing it's not fish they're after."

## The MARA W1/GaZette

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The deadline for materials to appear in the W1/GaZette is noon on the Sunday before the first Wednesday of the month.

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### **MEMBERSHIP INFORMATION:**

Club Secretary: Barry Fox W1HFN

Annual Dues: Regular \$25

Family \$30

Fixed income \$15

Meetings: 2nd Wednesday, 7:30pm September to June

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MARA owns and operates three FM repeaters co-located on Burbank Hospital in Fitchburg. W1GZ on 145.45 (CTCSS 74.4), AB1GF on 224.34 MHz (CTCSS 103.5) and W1HFN on 927.5625 (-25 MHz) (CTCSS 74.4). The 2m repeater is also reachable via IRLP node 8433 and Echolink node 688832.

***Watt's Happening***

**Sundays, 0800 local 5330.5** (ch 1) USB  
Western Mass Emergency 60M Net  
Alternate frequencies are 5346.5 (ch 2),  
5366.5 (ch 3), 5371.5 (ch 4), and 5403.5 (ch 5).

**Sundays, 0830 local 3944**  
Western Mass Emergency Net. Alternate  
frequency is 3942 in case of QRN, QRM, or  
frequency in-use. Also a good idea to scan up  
and down 10kHz if you cannot find the net.

**Sundays, 0900 local 145.45-**  
Montachusett Emergency Net

**Tuesdays, 1930 local 145.37-**  
WMEN Templeton Emergency Net

**Wednesdays, 1900 local 145.37-**  
Gardner/Templeton Emergency Net

**Nightly, 2100 local 146.97-**  
Central Mass Traffic Net

**First Monday, 1900 local 3943, 7245**  
RACES Net

**Tuesday, Thursday, Saturday, 1800 local 3978**  
Western Mass/RI Phone Net

### **For Sale/Ads**

*de Tom AB1GF, Ab1gf@arrl.net, 978 467-6658 .*

10 Rohn 25 ft sections	\$50.00 each
EZ Way HD40 40' Crank-up tower	\$200.00
Hygain TH-6 Tribander, complete	\$150.00
Tarheel 100A-HP continuous coverage HF Antenna, with MFJ Memory tuner	\$475.00
Mosley CL 33 WARC, needs insulator kit	\$175.00

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