



PARTicles

The newsletter of PART of Westford, MA – WB1GOF

January 2011

President's Column

Happy New Year! I hope everybody enjoyed the holiday season. We had a great turnout at the PART Christmas Party in December. I hope everybody had a good time. Many thanks to Hugh (N1QGE) for pulling it all together, and to Geoffrey (KB1USE) for helping with the prizes.

As I look back on my 4 years in this hobby, I realize how much I've learned and how much fun I've had doing it. I've had a lot of help from a great many elmers. I'm convinced that the vast majority of the ham community consists of individuals who enthusiastically share their time, equipment, and knowledge, and are courteous and professional on the air.

There are so many fun ways to spend one's time in this hobby, and yet I've caught myself focussed disproportionately on the negative aspects of the hobby, such as the LIDs on the repeater, 2m interference, and cowardly anonymous emails telling hams to stop enjoying their brand of fun in the hobby. Unfortunately, these topics tend to dominate conversations. On one hand, learning to track an unknown radio source is a valuable skill, but the havoc that these individuals wreak certainly detracts from the fun.

I find it unfortunate but understandable that some of our best operators on 2m choose to enjoy the hobby on other frequencies and in other ways. Its really too bad that the LIDs have chased you away. They could benefit the most from your tutelage, if only they would learn the lessons that we teach.

I'm going to try really hard to make 2011 the year that is focussed on FUN and not focussed on the negative aspects. For me, that means continuing to learn CW, operating the K1 which I just built, chatting with local friends on the 2m repeater, elmering Kimberly (KB1PZG) and Geoffrey (KB1USE), going after the SKCC Centurion award, and participating in club activities.

Consider making yourself a New Year's resolution to find an elmer, improve your operating skills, learn a new piece of the hobby, build an antenna, or anything else that you think would be fun. Offer to be an elmer to an operator who needs it. Most of all, have a lot of fun, and don't let the LIDs wear you down.

73 de Andy KB1OIQ

Next Club Meeting – January 18th!
Meeting will be held at the police station. 7:30 PM start time,
come earlier to socialize

Upcoming PART Meetings/Events

Jan. 18, 2011

- January club meeting night. Guest speaker is Frank Etzler (N8WXQ), Club dues are due in January

Feb. 5, 2011

- PART Monthly breakfast 8:00 AM – Westford Regency (NOTE: 1st Saturday, really it is!)

Feb. 15, 2011

- February club meeting night. Club dues were due in January

Treasurer's Report

PART Treasury 17-Nov-10 thru 03-Jan-11

	General Fund	Repeater Fund	Checking Total
Old Balance	2681.42	396.04	3077.46
Income	1080.29	348.67	1428.96
Expenses	905.33	0.00	905.33
New Balance	2856.38	744.71	3601.09

PART Membership Demographics as of 3-Jan-11

	Households (New + Renew)	Individuals (New + Renew)
Full (\$25)	3 (1 + 2)	3 (1 + 2)
Senior (\$15)	3 (1 + 2)	3 (1 + 2)
Family (\$30)	0 (0 + 0)	0 (0 + 0)
Student (\$15)	0 (0 + 0)	0 (0 + 0)
Associate (\$10)	0 (0 + 0)	0 (0 + 0)
Grand Total	6 (2 + 4)	6 (2 + 4)

NEW MEMBERSHIP YEAR

Upcoming Events

- Feb. 19, 2011 Marlboro Flea (<http://www.qsl.net/n1em/2011flier.pdf>)
- Feb. 20, 2011 GBARC RadioXLII @ Westford Regency (http://www.antiqueradio.com/Radio_XLII_Full_Page_ad.pdf)
- Apr.3, 2011 FARA/Framingham Flea (<http://www.fara.org/flea/>)
- Apr. 29 & 30, 2011 NEAR-Fest Deerfield Fairgrounds, NH (<http://www.near-fest.com>)
- Every Wednesday, 6 AM, Owl Diner Lowell – Breakfast
- Every 1st Saturday, 8 AM, Regency Inn Westford – PART Monthly Breakfast

ARRL News

- Aim High in the ARRL January VHF Sweepstakes
- Midwestern Hams Spot, Track Tornadoes As 2011 Begins
- FCC Sends License Renewal for K1MAN to Administrative Law Judge
- ARRL Executive Committee Approves Grants for Five Schools
- ARRL Executive Committee Approves Grant Funding for Five Schools

PART Holiday Dinner 2010

By Hugh Maguire – N1QGE

The PART holiday party was held at the Yangtze Restaurant as it has in the past. This year we added a gift raffle with a wide range of prizes. There were ARRL items for Amateurs, practical technology for everyone, and home décor items for non-amateurs.



Books and Tech Toys for all



Bob N1RXV



All items displayed for evaluation



After enjoying a cash bar over 30 PART members enjoyed an all you can eat oriental buffet enhanced by a variety of soups to begin and ice cream to complement fortune cookies. Jeffrey, KB1USE assisted N1QGE with the drawings. Special thanks to N1RXV for all the photos.



The PART leadership will continue to evolve this PART holiday tradition. Please contact the board with your ideas for next year. Your ideas for days, dates, location, gift format, are all welcome.

Monthly PART Breakfast

Don't forget the monthly PART breakfast the 1st Saturday of each month at the Westford Regency Inn at 8 AM. The full hot & cold buffet breakfast costs about \$14 (includes tip) per person, a cheaper, lighter fare is available for adults and children. **NOTE: PLEASE let the folks who are settling the bill with the hotel whether you had a full or continental breakfast!**

Member Contributions

YASH, Yet another skyhook

By Allison Parent – KB1GMX

Due to a water incursion I lost my 40M end fed and up coming warm weather means scheduled removal of the 75/40M vertical. This created the desire, err desperation, for an antenna that would do 75 and 40m. It had to meet my quirky desires for the feed point being at or near the tower and also the origin of all things RF, the shack. Oh and it had to be short enough to fit the rather oddly treed property. A long search of the 'net for shortened antennas that were suitable for 75 and 40 and not horribly lossy and also less than 70ft as that was the longest span I could do from tower to trees. The upside of this is the antenna didn't have to perform or even be considered for 20/17/15/10m operation as I have good well qualified antennas for that.

Research:

One that kept popping up was actually for 160M the old and venerable inverted L. For 80M that was about 65-70ft in the quarter-wave flavor and the half-wave end fed version at about 130ft. Well shoot the long one it isn't going to fit. The short one needs a bunch of radials under it to be good and that was doable but on 40M it would require different feed. I'd looked at oddball size antennas like 43 foot verticals and things like the ladder wire fed 88ft doublet and it hit me the not so common almost three eighths [3/8ths] wave at 75M was longer and had a higher feed point resistance, radiation resistance and was also 3/4wave at 40M meaning it's feed point would be similar. With higher feed point resistance the few radial I could provide would prove more effective.

Execution:

So out in the yard with the tape, the vertical portion of the "L" was going to be short, 26ft; my tower is only 29ft. But the run to the trees northwest of the tower was an easy 70ft. So, two insulators, some rope and 95ft of wire later Inverted L. The feed point at 7.1 looked like 94ohms with about +300ohms capacitive as it was shorter than a odd quarter wave. At 75M or 3860 my target it was about 100 ohms and -280reactive as it was longer than a quarter wave. So far, no surprises. This actually works as we can tune out the reactive component and match the resulting impedance easily enough and since the feed resistance was higher than 50ohms the RF ground quality wouldn't need as many radials to keep losses low. Since the feed point was the base of the well grounded tower plus a few radials wrapped around the house in the garden it was looking good. The tuner was an old marine unit that can



match anything from 25 to 150ft on any group of selectable taps from 2mhz to 18mhz. A few hours with the MFJ and moving coil clips and tweeking variable caps netted me multiple settings that gave a less than 1.5:1 SWR on 80 that went from 3500 all the way to 4000 and a 40m the SWR from 7.1 to 7.3 was under 1.5:1.

Result:

Low SWR is nice but can any one hear me. Since the vertical was still in place I have a comparison antenna. First shot on 40M netted me Poland, then a three way QSO between Wales and Spain. 75M was tried the next morning for a local net that has members on the Cape, Southern NH, CT and LI NY and the good news is it heard as good or better, they could hear me better. Now that I can talk locally on 75 can it do more? Yep, the Carib, 4 land, and a 8 lander in Wisconsin. In every case it was as good or better than the vertical and didn't require the feed line running across the grass. Does it meet the need, is it the be all end all, no. But it fits, works well at a low height fills the 80/75/40M need and oddly enough it's end fed.

While my needs may see odd many have similar problems and the inverted L with a tuner at the base may be the solution to a cramped antenna situation at the lower end of HF. This is well known to the MW ops on 160 where few can build a big antenna. During the research phase where the problems seemed to mount [space the final frontier] I realized that a limited number of antennas that were more band specialized made it far easier to limit the number of forced compromises. The most notable was trying to feed the long antenna on all the other bands and then realizing the rather fragmented pattern was less than useful wouldn't have to happen. Looking into how it may behave higher bands was at best a quick peek and the general result is not so good there. The goal was a reliable and simple antenna that allows me a 100W presence 80/75/40 and this one does that well enough.

Radio Awards and Accomplishments

By Andy Steward – KB1OIQ

I think we should have a column in PARTicles where people are recognized for their awards and accomplishments in the hobby. For example, did you recently earn the ARRL Worked All States award? Did you build a truly FB antenna? Maybe you made a great DX contact, or you had your very first CW QSO, with no other fanfare except your own excitement and sense of accomplishment, perhaps you elmered a fellow ham while studying for a license exam?

Well, we need to start somewhere, so I'll list two of my very recent accomplishments:

- Andy (KB1OIQ) became SKCC Centurion #512 for making CW contacts with 100 different SKCC club members. SKCC is the Straight Key Century Club whose members are very patient with brand new CW operators. Use of a straight key (no paddles) is required. Get more info from their website at <http://www.skccgroup.com>.
- Andy (KB1OIQ) was twice awarded the QRP ARCI 1000 Miles Per Watt award:
 - 1923 miles per watt for his 2 watt QRP contact on 17m with IK2CIO in Italy
 - 1084 miles per watt for his 1 watt QRP contact on 20m with W4DFU, the Gator Amateur Radio Club at the University of Florida.

In both cases, the antenna was a 135 foot dipole at 50 feet fed with window-line and a homebrew tuner. Both contacts were made on my newly built Elecraft K1. QRP ARCI is a group of QRP enthusiasts. Get more info from their website at <http://www.qrparci.org>.

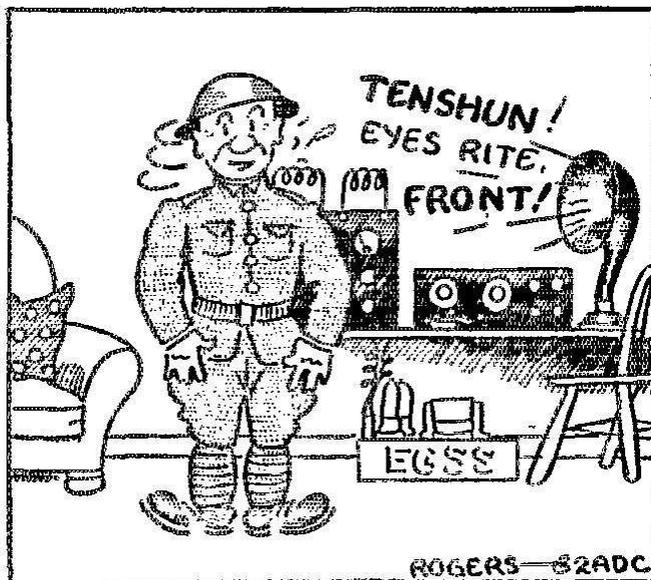
Please send me an email containing any award or accomplishment that you would like to see published in PARTicles. I can be reached at kb1oiq@arrl.net.

Have a lot of fun! 73 de Andy KB1OIQ

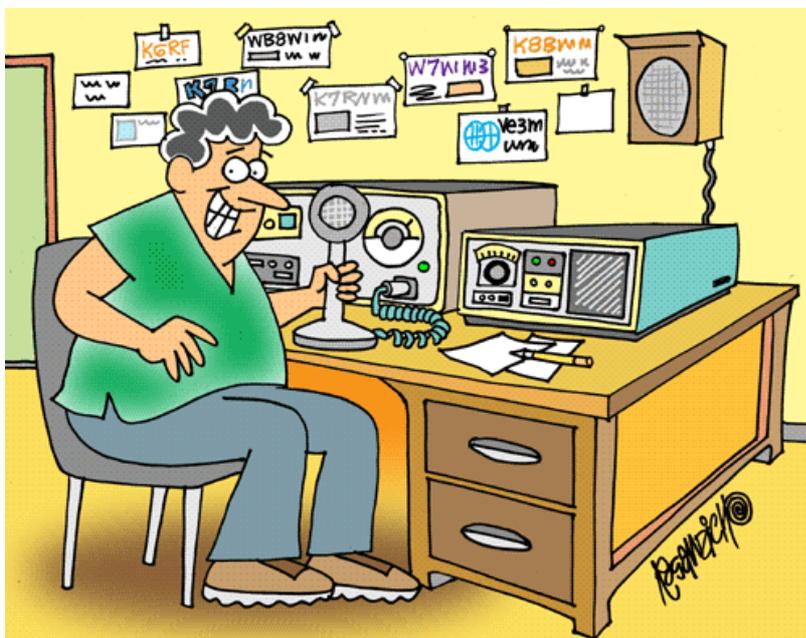
From Alan Lewis – K1ALL

I recently was notified that I won 1st place in the United States Area 1 Low Power SSB Single Operator Category for 20 meters in the 2010 World Wide WPX Contest. It's the first DX contest I have tried and was very surprised when the certificate arrived in the mail last week.

Ed. Note: Congrats to both!



DRILL NIGHT AT AN ARMY AMATEUR RADIO STATION



Local Nets

146.955 Nets – There are a number of nets that are regularly scheduled on the 955 repeater.

Sunday Night PART Net – every Sunday night at 2000/8:00 PM

Sector 1C RACES Net – this net occurs the 1st Monday or every month (except when it is a

holiday). Skywarn and ARES Nets – these nets are spontaneous when local conditions warranted.

Repeater Information

Repeater Interference

The 146.955 repeater continues to see interference to existing conversations as well as at random quite times throughout the day and night. The repeater interference committee needs your help in collecting information about this interference.

If you hear any type of interference, please report the following info to "**repeater**" at "**wb1gof.org**":

- Time: When did the event happen?
- Observing location: Where were you? Were you mobile?
- Frequency: Input only (146.355 MHz)
- What you heard: Voices, tones, kerchunking or whatever.
- Signal strength: Either by ear (noisy, quiet or full quiet) or S meter
- Radio: To get an idea of the reporter's radio situation.

* Most important - what direction: How did you determine direction? This is the most essential piece of information. Even if it's an estimate as in "Roughly east" or "from the Northeast" it's useful.

NEVER EVER reply or direct any thing to the sick person causing the interference. Because some of us have answered this person, he knows we are aware of him and that is what keeps him doing it. Also since you are communicating with a non IDing station you are operating just as illegally as he is. **YOU ARE BROADCASTING! NEVER TALK ABOUT INTERFERENCE on air. NEVER**

If you are interested in assisting in helping us identify the sources of interference, contact Terry-KA8SCP.

EmComm events and repeater use

Most everyone knows that the 146.955 repeater is used during times of emergency situations, drills and exercises. Skywarn and the monthly RACES drills are the normal events.

So what does this mean to those that are just looking for regular QSOs with other users? It means that if you are in a regular QSO and there is a significant weather situation that has been getting press/air-time lately, you can expect that if severe weather develops in our area, the folks from Taunton-WX1BOX may interrupt a QSO and ask anyone on frequency what may be happening weather wise. The BOX operator will probably ask for specific information, hail, wind damage, property damage from lightning or wind, etc. Please give him the information he needs or tell him that you've not heard of any such activity. You don't need to tell him it is sunny in Nashua!

There may come a time when an unexpected emergency situation arises. These will significant events that may affect life and property. This is where ARES/RACES activity may step in. Usually an NCS will interrupt a QSO and announce the situation and ask for a QSO to cease or to be "aware" of the possibility of priority calls/traffic. Please make sure you leave breaks between transmissions so stations with traffic can get in between QSOs. If there is enough traffic, it may be necessary for your existing/interrupted QSO QSY to another frequency. You should use your best judgment or check with the NCS on what he feels is best.

If you have any questions, please feel free to correspond with either Hugh-N1QGE (Westford RACES Officer and Skywarn NCS) or Terry-KA8SCP (regional RACES Officer and Skywarn NCS). They will be more than happy to talk about these programs with you.

PART Gear

The PART Quartermaster has lots of great PART-ware for sale including hats, mugs, and shirts. You can get information how you can obtain your PART-ware at the monthly club meetings.

Club members are also encouraged to obtain an official PART badge from [The Sign Man](http://thesignman.com/clubs/part.html) (<http://thesignman.com/clubs/part.html>) PLEASE NOTE: There is a new PART badge available if you'd like to order one. Price for badge is \$15 which includes shipping and handling.



EmComm

RACES – The WB1GOF 146.955 repeater is used on the first Monday of every month (except federal/state holidays) for RACES starting at 1930 local time. If you are interested in being part of the local emergency communications team in your community, feel free to contact any of the following folks:

Terry Stader – KA8SCP, MEMA Region 1 RACES Officer
Hugh Maguire – N1QGE, RACES Officer, Town of Westford
Bill Ohm – W1OHM, RACES Officer, Town of Chelmsford
- We need radio operators that can pass messages on to the local emergency management directors in several towns in northern Middlesex County.

Skywarn - The WB1GOF 146.955 repeater is also used for reporting significant weather events to the National Weather Service from our local spotters. We expect to have a local Skywarn training class in 2010, more information as it becomes available. You can provide valuable information even if you have not attended one of the training sessions. Listen to the Skywarn Net Control Station for reporting criteria, when you have information that qualifies, please advise him with your report.

Situational Awareness – Recently, the Massachusetts Emergency Management Agency has asked the Amateur Radio community to provide situational awareness and disaster intelligence information within your local community via RACES, ARES and/or Skywarn stations. Significant events such as widespread power outages can be reported and by agencies such as MEMA to evaluate the scope of a blackout for example. Initially, you should try and contact RACES or ARES operators on the Westford 146.955 repeater to pass this information. More on this new program will be forthcoming.

PART Sunday Night Net – The PART Net each Sunday night is an IMPORTANT part of our regional EmComm function. With each station that checks in from the surrounding communities, we test our ability to communicate vital information to the ham radio community. Sure we announce club info but we can also communicate regional disaster news and serve as a “hub” for news of situations in our communities. The repeater is on a generator, so even if we loose power in the region, an ht with a supply of batteries will reconnect you to other local hams.



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