



# *PARTicles*

The newsletter of PART of Westford, MA – WB1GOF

*May 2010*

## President's Column

Field Day is coming soon, and the Field Day Committee (Charles AA1VS, John W1JMA, and Steve N1BDA) has been busy making plans and proposing a budget. Stay tuned for further developments, which will also be announced at the next club meeting on Tuesday, May 18th, 2010.



There has also been a lot of interest and activity with the new D-Star repeater. I was pleasantly surprised at all of the questions during the last PART meeting. I resisted shut down the conversations, but the meeting was running late, and there were other topics to be covered. Indeed, it was a very active meeting.

As with all things in ham radio, I encourage people to do their own research. Terry (KA8SCP) and Ernie (N1AEW) are great sources of information. Their excitement over D-Star and the new repeater is contagious, and their ability and willingness to patiently separate fact from fiction is laudable. We should all be very thankful for their generous donations to the ham radio community.

Last month in PARTicles, Jim (K1VNV) wrote an article where he mentioned that he felt as though he has many elmers, due to the generous nature of people in the club. Those statements resonated with me. However, as a relative newcomer to the hobby, I've noticed that it can sometimes be difficult to know which elmers are feeding me good information. At first, a newcomer will take everything said by a more experience ham as gospel. Later, conflicting (often incorrect) information comes to light,

adding confusion to the experience. For me, this leads to more questions and research, as I try to separate fact from fiction.

I urge fellow hams of all experience levels to seek authoritative sources for information, educate one's self on the technology, and then help by dispelling the many myths that are prevalent in the hobby.

Our next PART meeting will be held on Tuesday, May 18th, 2010. Our speaker will be Scott (NE1RD), and he will talk about the "100lb DXpedition - QRP Style". I look forward to a great turnout.

### Membership Chairman

Gary (W1GFF) has resigned from the position of PART Membership Chairman, citing his busy schedule and numerous commitments. I would like to thank Gary for his service to PART in this role. Rich (AB1HD) will be serving as interim Membership Chairman.

In the near term, I will be looking for a volunteer to be the next Membership Chairman. While this role does not require a huge time commitment, it is a very visible role to people outside of PART, and to potential newcomers to the club. Folks will judge the club based on the first few people that they meet, and the Membership Chairman is often one of those people.

If you are interested in serving PART as its Membership Chairman, please contact me.

73 de Andy KB1OIQ

## Upcoming PART Meetings/Events

### May 18, 2010

- Scott Anderson – NE1RD will present the topic "100lb DXpedition - QRP Style"

### June 15, 2010

- Field Day preparation

### July - November 2010

- Speakers have not yet been scheduled for these dates

We have a large membership, and I'm sure each of you knows somebody who would be an excellent speaker at a future PART meeting. Perhaps YOU would like the chance to address the club. All of you can help! Please send me email with contact information for prospective speakers, including your self. I'll work out the logistics with the prospective speaker. All of you collectively know a LOT more people than I do. With your help, I'm sure that we'll continue the PART tradition of having fine speakers at our monthly meetings. Thanks, and 73 de Andy KB1OIQ.

### Field Day 2010

Save the date - June 26 & 27 2010.

PART will host Field Day once again this year. We are still working out the details but here are some preliminaries. We hope to be back in a familiar location. The operation will be 3D or 4D meaning at least two HF stations with a VHF/UHF station running off of mains power. Food will be back in more seatings than recent years. The Board has approved four meals during Field Day. Lunch on Saturday, through lunch on Sunday will be prepared. From a technical side, we will be adding filters to the different stations to mitigate the interference of years past. We hope to take the best of past years and tweak it to make it better.

Field Day does not work without loans of equipment and folks to help out. We are looking for folks to help out with food, station captains to assemble and integrate stations, and folks to help out with antennas.

In terms of gear, we need HF stations, a VHF/UHF station, antenna's, coax, grounding equipment, tables, chairs. Then there are other things that you might not think of at first, signs, view graph presentations, your Elmering skills , that make a great Field Day. If you think there is something you can contribute, there probably is. Send aa1vs@arrl.net an e-mail.

### Where is this photo from?



## Treasurer's Report

PART Treasury between 17-Mar-10 and 20-Apr-10

	General Fund	Repeater Fund	Checking Total
Old Balance	3051.75	318.00	3394.75
Income	653.00	27.50	680.50
Expenses	336.17	\$0.00	336.17
New Balance	3368.15	345.50	3714.08

PART 2010 Membership Demographics as of 10-May-10

	Households (New + Renew)	Individuals (New + Renew)
Full	28 (2 + 26)	28 (2 + 26)
Senior	20 (2 + 18)	20 (2 + 18)
Family	7 (0 + 7)	14 (0 + 14)
Student	0 (0 + 0)	0 (0 + 0)
Associate	1 (0 + 1)	1 (0 + 1)
Grand Total	56 (4 + 52)	63 (4 + 59)

## Upcoming Events

- **Apple Blossom Parade May 15, Westford, MA – need hams for parade coordination. Contact Terry-KA8SCP**
- Flea@MIT, 3<sup>rd</sup> Sun Apr thru Oct, Cambridge (<http://w1mx.mit.edu/flea-at-mit>)
- Dayton Hamvention May 14-16, Dayton, OH (<http://www.hamvention.org>)
- Field Day June 26-27
- NE Division Convention Aug. 27-29, Boxboro, MA (<http://www.boxboro.org>)
- Fall NEAR-Fest Oct. 15<sup>th</sup> & 16<sup>th</sup> Deerfield Fairgrounds, NH (<http://www.near-fest.com>)



## Ham Radio Cruisecore Nights

131 Gorham Street - Rt 3A - East Chelmsford, MA 01824

Every Saturday 5 - 8pm. Learn about the exciting hobby of Amateur Radio - Meet other area Hams

Electric and HF antenna hookups available.....so bring your own Rig or GOTA box.

## Member Contributions

### YASH, Yet Another SkyHook

By Allison/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 a 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 short 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 44ft 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.

#### 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 north west 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 +300 ohms capacitive as it was shorter than a odd quarter wave. At 75M or 3860 my target it was about 85 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 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 2 MHz to 18 MHz. A few hours with the MFJ269 and moving oil clips and tweaking variable caps netted me two settings that gave a less than 2:1 SWR on 80 that went from 3725 all the way to 4000 and a third setting on 40m the SWR from 7.1 to 7.3 was under 1.5:1. That should keep the Tempo One and the HW101 happy.

#### Result:

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 land'er 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, completely? Is it the be all, end all, no. It didn't need any coils

or traps would either. But it fits the space, works well at a low height fills the 80/75/40M need and oddly enough it's end fed.

### **Thoughts:**

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. For those with no tuner or only one in the shack a watertight box, a variable cap and a large sized coil plus a relay can do the the job and made a 50ohm feed easy. The goal was a reliable and simple antenna that allows me a 100W presence lower HF and this one does that well enough.

73, Allison/kb1gmx

## **NearFest Report**

By Andy KB1OIQ

NearFest was recently held in Deerfield, NH. In terms of the weather, it was a fantastic weekend! Several people took the day off from work and attended on Friday. I was one of those people, and I'm glad that I did. It was a well timed "Mental Health day".

I attended NearFest with Steve (WA1KBE). We saw about a dozen other club members on Friday, and I understand that several other folks attended on Saturday. Terry (KA8SCP), Hugh (N1QGE), and Ernie (N1AEW) were selling donated items, the proceeds from which went into the repeater fund.

I saw a 5-element cubical quad for 2m that "had my name on it". It was being sold on behalf of a silent key, and the proceeds were to be donated to the Red Cross. The antenna just barely fit into Steve's car across the back seat. The quad is now operational in my back yard on one of my two "temporary" masts. I will probably be using it during the June VHF QSO party.

I also purchased a Lionell J-38 CW key in very good condition, with all of its parts intact, including the original box. With minimal disassembly, I cleaned it with Q-tips, very warm water, and Simple Green. I don't plan to polish it - I rather like it the way it is. I recently had 6 QSOs on 80m during the SKCC weekend sprint.

Steve (WA1KBE) found a great deal on copper antenna wire, and Jim (K1VNV) found a nice Bird wattmeter. I didn't see many people leaving empty handed.

## **PART members travel to NEAR-Fest in Deerfield NH on April 30<sup>th</sup>**

(by Hugh Maguire - N1QGE)

After collecting donations from PART members the collection was ready. Ernie N1AEW and Hugh N1QGE and Terry KA8SCP packed up a borrowed trailer and departed for Deerfield to sell items to benefit the WB1GOF repeaters.



Arriving on Friday morning after 9am we searched for the ideal location and found a great one right in front of Barn #2. A corner lot with good traffic, shielded from the wind, a short walk to restrooms and food, and afternoon shade.



Everyone had a good time and we sold 60%-80% of what we brought. \$342.00 was raised for the WB1GOF repeaters. I know that other PART members picked up stuff [maybe like a 2M cubical quad?] and we all would like to hear about that in a future issue of PARTicles.



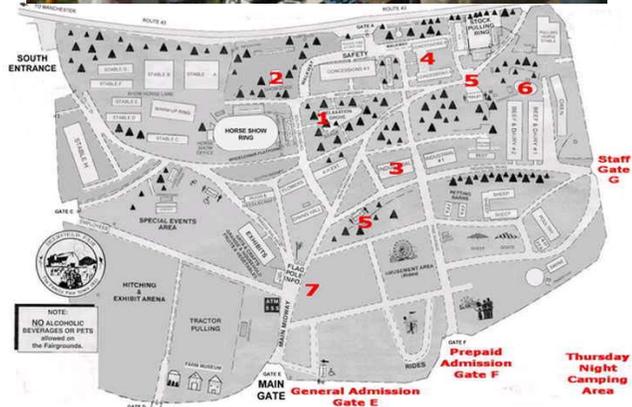
Fund raising will continue this summer leading up to the Boxboro Ham convention where we will do this all over again. Start now. Collect all your new, old, unused, or seldom used, or don't know



how to use, or don't want to use anymore, stuffs.

Leave your donations of equipment for sale at: 127 Coldspring Road Westford, the corner of Cold Spring and Forge Village roads.

NOTE: If nobody is home simply leave your stuff inside the green shelter. Cash donations are also always very welcome; bring to the next meeting.



## **NVARC Slow Speed CW Net**

Pete-KB1LZH reports that there is a Slow Speed CW Net being conducted by our neighbors in Pepperell. If you have some interest in learning CW and or learning how to interact in a NET, you might want to join the net on Tuesday and Thursday evenings, at 7:30 PM. The net is run by the NVARC in Pepperell. It is a good chance to develop skills in NET procedures and in developing CW capability. Their net meets on 10 meters; 28.123 MHZ. The (usual) Net Control Operator is Bruce, K1BG.

## **Repeater News**

### **442.450 WB1GOF UHF Repeater D-Star update**

The D-Star settings for WB1GOF Port B D-Star system:



RX Freq: 442.450

TX Freq: 447.450

MYCALL: <your callsign>

URCALL; CQCQCQ

RPT1: WB1GOF B

RPT2: WB1GOF G (make sure this is set!)

The gateway, repeater and controller are now connected together at the repeater site giving the “stack” and its users full D-Star capabilities. Use this link below to check out the activity on our system: <http://www.dstarusers.org/viewrepeater.php?system=WB1GOF>

A mechanism to donate to the repeater fund can now be found on the [www.wb1gof.org](http://www.wb1gof.org) website when clicking on any of the repeater links. Remember that no funds from PART membership dues fund equipment maintenance or purchases. The repeaters are self funded by the owners and contributions from the users, raffles and other fund-raising efforts. If you are a frequent user, please contribute your fair share.

## **Repeater 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 1<sup>st</sup> Monday or every month (except when it is a holiday).

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

## 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.
- There is a Region 1 RACES meeting to be held on Saturday, March 20<sup>th</sup> at the MEMA Region 1 HQ in Tewksbury from 10:00 am to noon. Contact Hugh-N1QGE or Terry-KA8SCP for more information.

**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.



**Field Day  
June 26-27 2010**



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