



# PARTicles

The newsletter of PART of Westford, MA – WB1GOF

January 2014

## President's Column

- *Andy Stewart (KB1OIQ)*

Happy New Year!

The weather had been very strange lately! Welcome to New England! On the night of our annual Christmas Party, the snow was really coming down! It wasn't predicted to be that way, which is why the event wasn't cancelled. Still, 30+ hardy souls showed up at the party and we had a great time! We practically had the restaurant to ourselves. I made it there and back driving on bologna skin tires. I brought a shovel and needed it to get out of the parking lot.

We had extremely frigid weather for our monthly breakfast on January 4th. It was -4 degrees F on my car's thermometer that morning. Only 8 hardy souls arrived for breakfast on that morning.

Now, we've got this 40 degree F stuff plus the recent rain, so now we've got an early "mud season", as shown by tire tracks in my yard that my lovely daughter put there with the SUV. I had to rake the mud back into place, for we all know it will freeze shortly and turn that parking spot into frozen ruts that can be tough to traverse.

It is never too cold to hunt a fox! Well, that's what some club members believe. John (KB1MGI) has deployed a 2m fox that can receive DTMF tones to enable the fox transmitter for 15 minutes at a time. In this way, the fox can stay hidden for days at a time, stopping only when the battery expires. John now has a second fox on 70cm. There are different challenges hunting a fox on 70cm, but a couple of club members have risen to this challenge! It is great to see people having fun with this activity. I am looking forward to having some free time to hunt the 70cm fox. Thanks, John!

By the time you read this, I'm sure Mother Nature will have thrown us another curve ball. On the air, the recent solar activity has caused the bands to act strangely. On 80m CW last night (Jan

12), I could hear the strong delayed echo of my own signal. I've never previously experienced this phenomenon. I almost turned off the full break-in feature on the radio. It was really weird. Was I hearing myself on the long path?

Now that the holidays are over, I've been focused on 3 different projects. First, I'm still working on a software project for Linux for the Byonics TinyTrak3. Secondly, I plan to build the NB6M Miniboosts QRP amplifier at the club Kit Building event on January 18th. I will make it with filters for 80/40/30/20m, and it will live in a child's metal lunch box (easy to carry, and easy to open to show off the circuitry). Finally, I'm working a lot of CW stations as part of the annual K3Y event for SKCC. It was my pleasure to work Charlie (K1PUB) and Rich (AB1HD) as part of that event. Charlie and I operate as K3Y/1 from time to time.

At the January club meeting, our speaker will be Terry Glagowski (W1TR), and he will be discussing the logistics of erecting a tower. This talk includes construction details, permits, and lots of pictures. This should be a great talk! I hope you can all make it to the meeting.

Our February speaker is also secured, and that'll be a great talk as well, but if I tell you now, you won't read next month's PARTicles. ;-) I'll also be sending email about this meeting.

The "cabin fever" flea market is coming up in Marlboro, sponsored by the Algonquin Amateur Radio Club, on February 15th, at the Witcomb Middle School (formerly Marlboro Middle School).

Future events: Kit Building in January, Patriots Day Special Event Station (K1P) in April, Field Day in June, 13 Colonies Special Event in July (K2H), WRTC2014 in July, and the Centennial ARRL Convention in Hartford, CT in July.

73 de Andy KB1OIQ

**Next PART meeting: Tuesday January 21<sup>st</sup>**

@1930 – Westford Police station

## Treasurer's Report

### PART Treasury between 18-November '13 & 16-December '13 (As of 17- December '13)

	General Fund	Repeater Fund	Checking Total
Old Balance	\$2,887.15	\$2,423.82	\$5,310.97
Income	\$ 15.00	\$ 10.00	\$ 25.00
Expenses	\$ (248.82)	\$ (336.82)	\$ (585.84)
Net	\$ (233.82)	\$ (326.62)	\$ (560.44)
New Balance	\$2,653.33	\$2,097.20	\$4,720.53

### PART 2014 Membership as of 15-January '14

	Individuals (= New for 2014 + Renew for 2014)	Households (= New for 2014 + Renew for 2014)
Full (\$25)*	5 (= 2 + 3)	5 (= 2 + 3)
Senior (\$15)*	8 (= 0 + 8)	8 (= 0 + 8)
Family (\$30)*	2 (= 0 + 2)	1 (= 1 + 0)
Student (\$15)	1 (= 0 + 1)	1 (= 1 + 0)
Associate (\$10)	0 (= 0 + 0)	0 (= 0 + 0)
Grand Total	16 (= 3 + 13)	15 (= 3 + 12)

ARRL members: 13

ARRL Life members: 2

NOTE: \* Starred lines changed since 8-December '13

#### Latest new PART members:

Robert/KA1VF

##To pay dues##

PART, P.O. Box 503, Westford, MA 01886-0015

-or-

Club Meeting, Westford P.D., 7:30PM, 3<sup>rd</sup> Tuesday

## Upcoming PART Meetings/Events

### January 21<sup>st</sup>, 2014

- PART Meeting. 7:30 -9 p.m. Westford Police station

### February 1<sup>st</sup>, 2014

- PART monthly breakfast. Westford Regency. 8-10 AM (\$15/\$9; kids: \$8 – see note below)

### February 18<sup>th</sup>, 2014

- PART Meeting. 7:30 -9 p.m. Westford Police station

### March 1<sup>st</sup>, 2014

- PART monthly breakfast. Westford Regency. 8-10 AM (\$15/\$9; kids: \$8 – see note below)

### March 18<sup>th</sup>, 2014

- PART Meeting. 7:30 -9 p.m. Westford Police station

### April 5<sup>th</sup>, 2014

- PART monthly breakfast. Westford Regency. 8-10 AM (\$15/\$9; kids: \$8 – see note below)

### April 15<sup>th</sup>, 2014

- PART Meeting. 7:30 -9 p.m. Westford Police station

## Monthly PART Events

- Every Sunday, 8 PM – PART Net on 146.955 repeater
- Every 3<sup>rd</sup> Tuesday, 7:30 PM – PART Meetings at Westford Police station
- Every 1<sup>st</sup> Saturday, 8 AM, Regency Inn Westford – PART Monthly Breakfast
- Every Wednesday, 6 AM, Owl Diner Lowell – Breakfast

**New England Area Ham/Electronic Fleas:**

<http://web.mit.edu/w1gsl/Public/ne-fleas>

**2014**

- 1 Feb Windsor CT VR+C Mus 115 Pierson LN @8AM Indoor John 860 673 0518 +
- 8 Feb Springfield VT CVFMA @Cong Ch Steve N1QDT 802 885 8110 A+
- 15 Feb Marlborough MA AARC @MS \$5@9 \$20/T@6:30 Bef 9 Tim KA1OS 508 919 6136 +
- 15 Feb Augusta ME AARA @ClbCalumet Bill K1NIT 207 512 0312 A+
- 16 Feb Westford MA NEARC RadioXVL 8AM@Regency \$10 antique Bruce 603 772 7516 F+
- 22 Feb S Burlington VT HAM-CON @HI I89x14 \$8@8 \$15@6 Mitch W1SJ 802 879 6589
- 1 Mar Chicopee MA MtTomARA @MooseLodge @8:30 S@6:30 Mary KB1ME 413 222 1990 +
- 2 Mar Hicksville NY LIMARC @Levittown Hall Richie K2KNB 516 694 4937 A+
- 15 Mar Dayville CT ECARA 8A @StJosephCh Paul KE1LI 860 928 5147
- 16 Mar Southington CT SARA \$5@8A @HS \$20/T@6:15 eve Norm W3IZ 860 584 1403 F+
- 28,29 Mar Lewiston ME AARC ME Conv @Ramada @8 Ivan N1OXA 207 784 0350
- 6 Apr Framingham MA FARA @Keefe Tech \$5@9 \$25/T@7:30 Bev N1LOO 508 626 2012 +
- 12,13 Apr Wakefield MA Photographica @AmericalCtr ~photo~ John 781 592 2553 F+
- 12 Apr Windsor CT VR+C Mus 115 Pierson LN @8AM Outdoor John 860 673 0518 +
- 18 April S.Portland ME PAWA @AmLegion \$6@8 \$10/T@6:30John W1JLB 207 776 2288 W+
- 20 Apr Cambridge MA FLEA at MIT Mitch 617 253 3776 F+
- Third Sunday April thru October
- 27 Ap Middletown NY OCARA @CommCtr \$7@9 \$12Sell Neil AC2O 914 490 2001 F
- 2,3 May Deerfield NH NEARfest XV @FG Mike K1TWF 978 250 1235 R+
- 10 May E Greenbush NY EGARA @FireCo \$6@8 \$6/T@6 Tom KC2FCP 518 272 1494 W+
- 18 May Cambridge MA FLEA at MIT Mitch 617 253 3776 F+
- 7 June Hermon ME PSARA @8 @HS TG@6:30 Jerry K1GUP 207 848 3400 W+
- 7 June Windsor CT VR+C Mus 115 Pierson LN @8AM Outdoor John 860 673 0518
- 15 June Cambridge MA FLEA at MIT Mitch 617 253 3776 F+
- 18,19 July Hartford CT ARRL Nat Conv 100th Anv. W+
- 20 July Cambridge MA FLEA at MIT Mitch 617 253 3776 F+
- 17 August Cambridge MA FLEA at MIT Mitch 617 253 3776 F+
- 20 Sept Forestdale RI RIAFMRS @VFW \$5/Sp@8 Pete AA1PL 401 639 4484 T+
- 21 Sept Cambridge MA FLEA at MIT Mitch 617 253 3776 F+
- 12 Oct Meriden CT Nutmeg @Sheraton was Wallingford John N1GNV 203 440 4973
- 19 Oct Cambridge MA FLEA at MIT Mitch 617 253 3776 F+

**July 17-20, 2014 -- Hartford, Connecticut**

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**In the News**

- [ARRL Centennial Convention \(PDF\)](#)
- [ARRL Plans Centennial Celebration in Hartford in 2014](#)

More information coming soon.

## ARRL Hamfests and Conventions



### Hamfest/Convention

02/15/2014 | [Algonquin ARC Flea Market](#)

**Location:** Marlborough, MA

**Type:** ARRL Hamfest

**Sponsor:** Algonquin Amateur Radio Club

**Website:** <http://n1em.org>

[Learn More](#)



### Hamfest/Convention

03/16/2014 | [SARA Flea Market](#)

**Location:** Southington, CT

**Type:** ARRL Hamfest

**Sponsor:** Southington Amateur Radio Association

**Website:** <http://www.chetbacon.com/flea2013.pdf>

[Learn More](#)



### Hamfest/Convention

07/17/2014 | [ARRL NATIONAL CENTENNIAL CONVENTION](#)

**Location:** Hartford, CT

**Type:** ARRL Convention

**Sponsor:** American Radio Relay League

**Website:** <http://ARRL2014.org>

[Learn More](#)

### The first Fox Hunt season of 2013 has ended

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- *John KB1MGI*

I placed my first Fox out on Field day weekend at the Concord Rod and Gun Club. I did not save that sign in card to record the finders. Then I started placing the Fox out almost every weekend throughout the summer and fall into the Winter in the snow and cold weather. Other local Hams have also placed out Foxes over the summer and Fall. It was fun chasing two Fox on the air at the same time. Also during this summer we held a Fox Hunt training session on a Saturday morning on the Westford Common and we had around 17 Hams show up socially or learned how to track a signal down using body fade techniques and using their yagi from a distance to hear the Fox on the air. Its been a lot of fun for myself going out and hiding the Fox trying to out Fox the Fox Hunters. I did mess them up a few times because of reflections. I'm always trying to figure out new ways to set up different type of Fox Hunts. My newest type of Fox Hunt is to leave my Fox out in the same place for a week or two in standby mode waiting to be turn on by a DTMF tone. This type of Fox Hunt allows you to choose the date and time you would like to go out Fox Hunting. I will see how this works out over time.

I have also a second Fox I can run on 2 meters or 70CM. This Fox I will try to keep moving around on weekends to different locations. This Fox turns on and off manually. I have placed this Fox out on 432.300 MHz and I been told 70CM reflects more then 2 meters does. It has been a challenge for some to track down.

My future type of Fox Hunt is for anyone that can drive or be driven to the Foxes area and step out or just point a yagi out the window and take signal headings.

In the near future I'll be setting up a Drive Around Fox Hunt only. I will place the Fox out in the middle of a location that you will be only able to drive around and stop at different locations, and take a bearing on the Fox signal and place the bearing on a Map. I will provide that map that will have grid boxes on the map so you can draw all the bearing and heading you would like to take and plot down and pick a grid box you feel the signal is coming from, like R2 or D2 etc.

More information will come later. You may need to read up on Compass heading and Map declination for our area if you plan on using a Compass.

Now here the results of the 2013 Hunting Season I placed out the KB1MGI Fox 30 times.

The leader of the pack with 27 KB1MGI Foxes found out of 30 is Bob W1FDR.

Next with 9 Foxes found is Andy KB1OIQ, And third place with 8 Foxes found goes to Bob KB1SWZ. 6 Foxes Joe KB1SSA, 5 Foxes Ron KB1UXT, 4 Foxes Andy KB1NXM, 3 Foxes Phil KB1NFC, 3 Foxes Russ KB1UKU, 3 Foxes Matt KC1AIA, 3 Foxes Shauna KB1AIB, 3 Foxes Dave KE7CAP, 2 Foxes Art AA1HO, 2 Foxes Mark K1MGY, 2 Foxes Dick KB1ILO, 2 Foxes Kimberly KB1PZG, 2 Foxes KC1AJJ Tim, 1 Fox Alan K1ALL, 1 Fox Steve KB1MGG, 1 Fox Rich KB1SNB, 1 Fox Geoffrey KB1USE, 1 Fox Bill KB1UTS, 1 Fox Dale KB1ZKD. Also with no call signs were Andy's daughter Erin, Ron's sons Tom and Drew, And my Son Craig. And I only found 1 Fox out of 2 hunts KB1MGI. Hiding the Fox is easy. Finding the Fox is the hardest and fun part.

I hope everyone enjoyed Fox Hunting, It is a good excuse to great outdoors a take a walk in the woods and explore some of our Conservation lands in our area towns.

### Equipment Upgrade

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- *Bob W1FDR (Which One Foxhunter Delivers Results)*

I think it is generally known that I have upgraded to using a "dish" reflector, which is nothing more than an attic fan cover! A few years ago I replaced the attic fan in our home and since it came as a complete kit and I only needed the replacement motor, I had the attic fan cover left over.

For years my wife used it in the backyard as a bird water bath. Desperate for a reflector and walking around in the backyard I had a Eureka moment.

I commandeered it since it was great for a replacement as a human body reflector (I am not that large around in the human reflector area! Hi.) as first I placed the rig in the saucer area and it did work. Being a techie engineer I did not want to spend money and using scrap parts, I began construction of a center mounter brace to hold a 2/440 whip antenna. I then added a A-B-C BNC switch so I could add a homemade 2 Meter Yagi. As such I can use the mobile rig in the car to track down the general area of the fox and once that is done and I am certain of the area by moving off frequency



146.565-146.080 range, I park the car and I pull out dish assembly which consist of the 2/400 whip, a 2 meter Yagi and using the ABC Switch, I can switch between my Yagi and whip antenna. I use the Yagi to determine the path in the woods to follow on foot. When I near the fox, I switch to the whip antenna and when I am within 20-50 feet of the fox, switch to the 3 harmonic and using the dish as a point source indicator I move in on the fox. Bingo! The fox is always clever and now has moved to 432.3MHZ as the fundamental frequency. BY cleverness (accidental luck) I bought a tri-band whip which covers 2/440/ and 1296. 1296.9 is the 3rd harmonic of 432.3, how about that for lucky? Last summer while looking for the foxes, I would stop at yard sales and at one I bought a used scanner for 10-15 bucks that just so happens to cover 1296.9! More dumb luck...



Looking at the attached picture you can see my 432mhz Yagi, the A\_B\_C switch that I use to switch between the Yagi and the whip antenna. Pictured is the tri-band miniature whip (Yes, it is only 1-2 inches long), the 432mhz Yagi, my Yaesu VX-5 that I use for 146 and 432mhz frequencies and on the far right hand side is my yard sale special 1296.9 third harmonic receiver.

I am sorry so many people have been missing all the fun of fox hunting but look at the second picture and you will see why I am willing to share my success. My ham shack is full of fox pelts!! I know I am becoming famous for all the fox success. In fact, my wife just came down to the ham shack and said a group called PETA is upstairs in the living room and they want to talk to me and they have cameras and news people. Fame at last...

## Hunting for the 2m Fox ("FOX 1") - January 12 2014

- Tim KC1AJJ

This morning I had a chance to do some fox hunting. Unfortunately I didn't have my own car, I was using the XYL's car, with no mag mount. So I set out with just my HT and APRSDroid app running on my cell phone.

I initially headed through Chelmsford center out Route 110, going west. No signal picked up yet, although my antenna is inside the car, so I'm not expecting to pick up much until I'm fairly close to the fox. Passing the lime quarry I hit the box with DTMF 2, and then starting getting a tickle on the frequency. A little further past that, starting getting regular tones on it. I got out at Nashoba Tech in the parking lot and did my first body fade, slowly circling around, using the Google Maps app on my phone to orient myself. The body fade indicated I had gone too far west, and the fox was somewhere east of me, so I turned around and headed back east on 110.

I headed a few blocks east and stopped at a fitness club parking and did more body fade. This

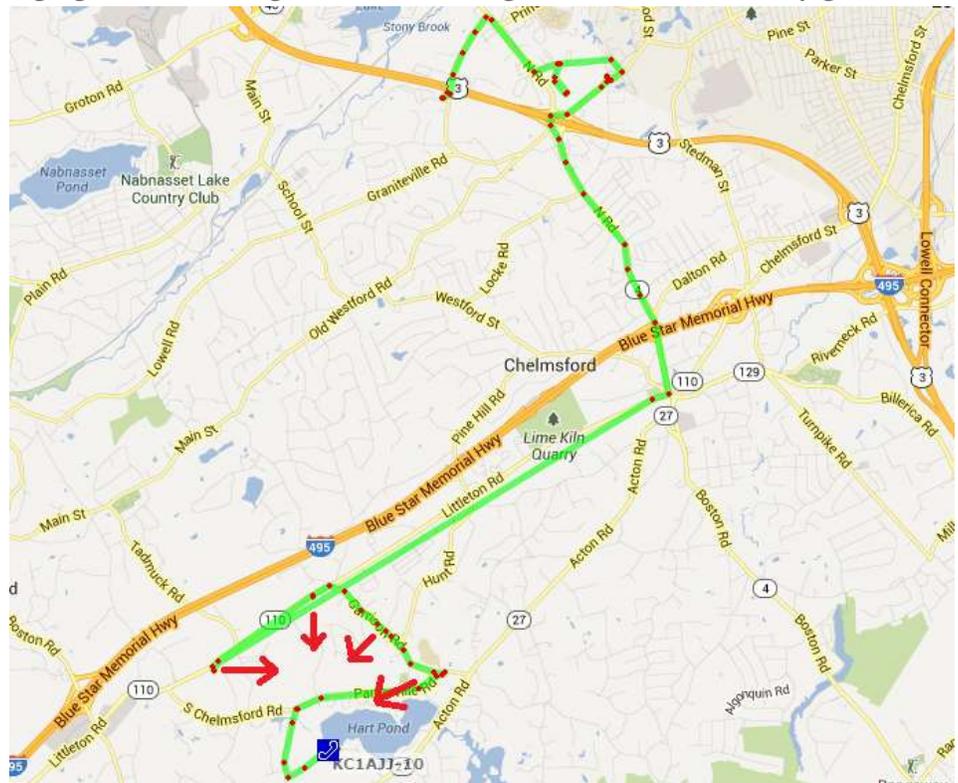


indicated it was somewhere south of me, so I took a right on Garrison Rd, which went in that general direction, and headed towards Hart Pond. I did not believe that the fox was at Hart Pond at this point, but figured it would be a good area to do my next reading.

Took another reading at Garrison and Pinewood Rd, north east of the pond, and circling around indicated pretty clearly that it was southwest of me, again towards Hart pond.

Next stop was at the Agway

parking lot. But the fox wasn't singing! Do foxes sing? I hit DTMF 2 again, and it immediately gave strong signal. Phew! Gave my call sign too on the fox frequency because I realized I hadn't provided it at least 10 minutes and was technically transmitting. This gave me a pretty clear reading that the fox was closer, and was west southwest of me, so I headed towards Gage Rd again (my old nemesis), which runs along the south side of the pond.



When I stopped at the single parking spot adjacent to the pond, I picked up the fox on the 3rd harmonic very cleanly, so I walked around my car for a while but found nothing. I then followed the path shown in my 2nd map. I had to wake it up once again during my search with a DTMF tone. The fox being up on the hill was tricky: it provided it extension and reflection into the paths going around the pond that made it hard to do body fade. I spent some time walking along the trail to the left of the pond, but lost the signal on the 3rd harmonic. I walked around the area to the right of the pond as well, but the signal wasn't as clean as by the car.

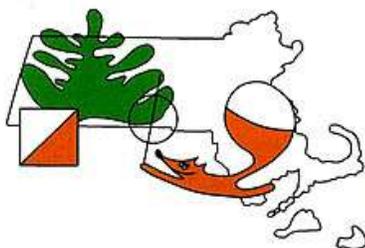
I saw a path going up the hill across the street from the pond, and wasn't sure this was public land, but it looked like a real path, so I put on my call sign badge just in case someone asked what I was doing, and walked up the path. I had to walk up and around the path up the hill twice before I convinced myself it sounded better up there than down by the pond and started cutting down off the path towards the road.

When listening to the 3rd harmonic, there's definitely a huge quality difference between "being near" the fox and being "very close" to the fox. When holding the HT close to the body and facing the fox, and being within 10-15 feet, the fox tones are extraordinary clear and pure with absolutely no static, and that's what helped me realize I was on the right track. Fun!

## Events

### USA ARDF Championships in Boston June 5 - 8

*Joe Moell KØOV USA ARDF Coordinator*



USA's national ARDF championships will return to the northeast this year. Radio-orientees of all skill levels will gather in Boston, Massachusetts for four days of intense competition on the first weekend of June. The events will be open to any fan of on-foot hidden transmitter hunting, with or without a ham license. Visiting competitors from outside USA are welcome.

Classic five-transmitter competitions will take place on June 7-8, two meters on Saturday and 80 meters on Sunday. Prior to that will be the optional competitions

in sprints and foxoring on June 5-6.

Organizing and hosting these championships will be Vadim Afonkin KB1RLI, one of USA's most accomplished radio-orientees. He will be assisted by members of Cambridge Sports Union. Winners of the 2014 USA championships will be under consideration for membership in ARDF Team USA, which will travel to the mountains of Kazakhstan for the 17th ARDF World Championships in September.

Registration is now open, with a deadline of May 1. Go to the Boston ARDF Web site ([www.bostonardf.org](http://www.bostonardf.org)) to register online and get more information. For the latest updates, subscribe to a special group mailing list for participants and others interested in these championships by sending a blank e-mail to [usa2014ardf-subscribe@yahoogroups.com](mailto:usa2014ardf-subscribe@yahoogroups.com). Information about the sport of ARDF and ARDF Team USA is at [www.homingin.com](http://www.homingin.com).



## Repeater Nets

### PART 2014 Kit Building Adventure

*B. Scott Andersen, NE1RD*

Winter brings cold weather, warm fires on the hearth, and maybe a few flurries in the air. It is also a time to belly up to the bench, warm up the soldering iron, and get to work. PART will continue keeping that happy tradition going with its annual PART Kit Building Adventure slated for 18 January 2014.

It is important to get your kit purchased early to ensure that it arrives in time for the event. This year we are also encouraging participants to open their kits long before the event to perform a parts inventory. If you have missing or damaged parts you should contact your kit vendor and get those parts replaced before kit build day.

You are welcome to bring any kit of your choosing to the event. Below is a list of ideas for kits to prime the pump.

Kit name	Description	Price
41dB Step RF Attenuator	<a href="http://www.qrpkits.com/attenuator.html">http://www.qrpkits.com/attenuator.html</a> A step attenuator for fox hunting, etc.	\$50.00
MFJ-941EK antenna tuner KIT	<a href="http://www.mfjenterprises.com/Product.php?productid=MFJ-941EK">http://www.mfjenterprises.com/Product.php?productid=MFJ-941EK</a> This is the very same tuner they sell assembled (MFJ-941) except in Kit form for \$20 off. It handles 300 watts, has cross-needle meter, and the whole works.	\$129.95
Cyclone 40 An Innovative Transceiver from David Cripe, NMØS	<a href="http://www.4sqr.com/cyclone.php">http://www.4sqr.com/cyclone.php</a> This is a complete kit, including the enclosure. A high quality board package includes the pc board, front and back panels, the sides, and top and bottom all of which make up the enclosure. The control and jack labels are silk screened in white letters and vividly contrast with the black solder mask, and the holes for the connectors and controls are pre-drilled. The ends are "dovetailed" together making a very rugged, easy to build, and attractive enclosure.	\$104.00
Texas Topper	<a href="http://qrpme.com/?p=product&amp;id=TEX">http://qrpme.com/?p=product&amp;id=TEX</a> This is an amplifier for QRPp radios to bring Rockmites up to power levels approaching 5 watts. Requires enclosure (not included)	\$35.00
Rockmite ][ Transceiver	<a href="http://qrpme.com/?p=product&amp;id=RM3">http://qrpme.com/?p=product&amp;id=RM3</a> The original Rockmite has been updated by QRPme to include all controls, an additional stage of low pass filtering, and the new circuit board features all through-hole construction. Bands available: 80m, 40m, 30m, and 20m with a variety of frequencies in each band. Requires enclosure (not included). The original Rockmite from Small Wonder Labs was featured at one of our first PART Kit Building adventures.	\$40.00

Also worth considering are the line of Mini-Module kits from Elecraft <http://www.elecraft.com>, the complete line of kits from Hendricks <http://www.qrpkits.com>, and any of Rex Harper's kits from QRPme <http://www.qrpme.com>.

Find the kit that suits your mood and join your fellow club members in the joy of building. See you there.

## D-Star

### D-STAR Tidbits

- Terry KA8SCP

I thought I'd write about a few little tidbits of information about local D-Star goings on:

- The KS1R D-Star UHF repeater in Brunswick Maine has been upgraded to support connectivity to the XRF and DCS set of reflectors. This upgrade also allows you to use DTMF as well to control the connectivity and check status. View their dashboard at <https://ks1r.dstargateway.org>
- The W1MRA was upgraded recently to the same software as was installed on KS1R above. The W1MRA VHF repeater is known to have some receiver issues that are being worked on but can be heard in many locations.
- There is a D-Star training/new user meeting in the works to be held somewhere in eastern Massachusetts. Details are yet to be ironed out. Topics to be included are radio programming, linking and unlinking, common user questions and practices. Lots of time for Q & A.



## Repeater Nets

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

- Sunday night at 2000/8:00 PM Sunday Night PART Net – every
- Sector 1C Emergency Communications 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.

NOTE: You can LISTEN ONLY to this repeater audio by linking to this URL:  
<http://www.radioreference.com/apps/audio/?feedId=10933> (effective 2/2012)

**442.450 D-Star Nets – There are a number of nets that are regularly scheduled.**

- Sunday 8:00 PM [Ozark Mtn D-STAR Net](#) – Reflector 001C
- Tuesday 8:00 PM [New England Amateur D-STAR Net](#) – Reflector 010C
- Friday 8:00 PM CanNet D-Star Net – XRF021B

NOTE: The status of the WB1GOF D-Star repeaters can be seen at <https://wb1gof.dstargateway.org>

## 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 \$15 (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 staff know whether you had a full or continental breakfast!**

## Monthly Breakfast Pricing

The full breakfast is  $\$11.95 + 18\% + 6.25\% = \$15.00$  (rounded up slightly). This price has recently changed. Here is the math for completeness and full disclosure.

*Continental breakfast: \$9.00 (same price)*

*Full breakfast: \$15.00 (new price)*

*Kid's breakfast: \$8.00*



Copyright WB1GOF,  
Robert Schmeichel  
2011



Copyright WB1GOF,  
Robert Schmeichel  
2013

### Southgate Amateur Radio News

#### [W5KUB Streaming Video](#)

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Have you ever wanted to go to a Ham radio event such as Hamvention but were not able to go for a number of reasons? Now, with just a computer and internet connection you can virtually attend these events

#### [RAG 2014 tickets on sale](#)

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The BAA Radio Astronomy Group will be holding its 2014 General Meeting on Saturday, May 17 at the National Space Centre, Leicester, LE4 5NS. The last two meetings have both sold out ahead of the day and early booking is advisable

#### [Surrey Space Centre Deorbital CubeSat](#)

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Students and researchers at the Surrey Space Centre (SSC) in the University of Surrey, Guilford, are developing the 3U CubeSat Deorbital

#### [Cyber-security: Small satellite dish systems called ripe for hacking](#)

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Thousands of small satellite dish-based computer systems that transmit often-sensitive data from far flung locations worldwide, are at high risk of being hacked, including many in the United States, a new cyber-security report has found

#### [IOTA news from the Deutscher Amateur Radio Club](#)

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Weekly IOTA News - compiled by Klaus, DL7UXG of the Deutscher Amateur Radio Club

#### [Ofcom: 2.3 and 3.4 GHz Consultation Responses](#)

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The responses to Ofcom's consultation on the 2300 and 3400 MHz bands are now available

#### AMATEUR RADIO NEWS (various sources)

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##### [Amateurlogc 62 is Released:](#)

by peter berrett (VK3PB) on January 15, 2014

George gets the Raspberry Pi Echolink node on-the-air. Solving the GPIO problem, building a relay interface for the Pi, and using a Circuit Writer pen to create a PCB board.

##### [Ham Radio Club Aims to Add to Growing Ranks:](#)

by njherald.com on January 15, 2014

SHARON, Pa. (AP) -- Amateur radio - also known as Ham radio - is more popular now than it's ever been, said Tim Duffy, president of the Mercer County Amateur Radio Club. That might be surprising considering, if you don't know a Ham operator, you probably aren't even aware of the hobby. With more than 700,000 Hams in the United States, the hobby has grown since the Sept. 11, 2001, terrorist attacks, as people felt the need to be more prepared for emergencies and disasters, Duffy said. "When all else fails, we're there," he said. "When the phone companies overload, we're there. When the power goes out, we're there." The club has its own station at the Mercer County 911 center. Aside from emergency preparedness, Ham radio is a great way to meet people, learn about people and events in other parts of the world, and network for employment opportunities, Duffy said. "It's a tremendous fraternity," he said.

### [Coweta CERT Volunteers Recognized:](#)

by thecitizen.com on January 14, 2014

Members of the fourth Coweta County Community Emergency Response Team (CERT) class were front and center at the Jan. 7 meeting of the Coweta County Commission. Formed to provide assistance in times of disaster and community emergencies, members of the new CERT team are also amateur radio operators. Coweta County Emergency Management Agency Director Jay Jones told commissioners the county's fourth CERT team completed 20 hours of specialized training to assist each member and their respective surrounding neighbors in the event a disaster strikes their community. This training will allow members to support emergency management and other public safety agencies during times of need, Jones said.

### [88. Or How Telegraphers Coded 'Love and Kisses':](#)

by theatlantic.com on January 14, 2014

What humans will do to save themselves from typing a few characters: LOL. ROTFL. TTYL. <3. BRB. Universal sentiments and actions become encoded. Well, imagine that each character had to be tapped down the line in Morse code. Telegraph operators had even more incentive to cut down on letters than did even the T9 texters of yore. And so they came up with codes to communicate the things that they needed to say often. These were first codified by Walter P. Phillips into what became known as the Phillips Code in 1879. (It was updated several times, the last I found in 1975.)

### [Social Media's Best-Kept Secret:](#)

by sharonherald.com on January 13, 2014

MERCER COUNTY -- Amateur radio -- also known as Ham radio -- is more popular now than it's ever been, said Tim Duffy, president of the Mercer County Amateur Radio Club. That might be surprising considering, if you don't know a Ham operator, you probably aren't even aware of the hobby. With more than 700,000 Hams in the United States, the hobby has grown since the Sept. 11, 2001, terrorist attacks, as people felt the need to be more prepared for emergencies and disasters, Duffy said. "When all else fails, we're there," he said. "When the phone companies overload, we're there. When the power goes out, we're there."

### [A Life Lived: Ham Operator W2VDX Lived Life On the Right Frequency:](#)

by pressconnects.com on January 13, 2014

Bob Vasilow, of Owego, was a ham. Not in personality -- oh, no. Instead, the quiet and unassuming man, known far and wide as W2VDX, single-handedly spurred enthusiasm for amateur -- "ham" -- radios among relatives, friends and even strangers. When Bob died at age 83 on Dec. 1, he left a legion of dedicated hobbyists behind. Ham radios, short-wave equipment that requires a license to use, intrigued him as a kid growing up in Hudson, N.Y.

### [Cambie Students to Chat with International Space Station Astronauts:](#)

by richmondreview.com on January 12, 2014

A chance to chat with astronauts aboard the International Space Station doesn't come along very often. But a handful of students at H.J. Cambie Secondary hope to do precisely that this March, as the satellite whizzes by more than 300 kilometres overhead at speeds approaching 28,000 kilometres per hour -- almost eight kilometres per second -- for a brief six-minute communication window. The opportunity comes courtesy Cambie science teacher Karen Ibbott -- who made the successful application to the ARISS (Amateur Radio on the International Space Station) program -- and the technical expertise of the Richmond Amateur Radio Club, which is throwing its support, equipment and manpower behind the effort. The local hobbyist radio club's members were busy Wednesday camped outside Cambie's brick walls, braving the downpour as they ran through the first of several mock exercises they plan for the coming weeks, setting up the antennas, rolling out cables, and connecting amplifiers with radios, computers and generators. They want to work out all the bugs long before the big show, which is happening at a still-unconfirmed date in the first two weeks of March. Wednesday's exercise buoyed their confidence, though they did identify a couple of areas that could be improved, said Kishore Nair, a 10-year member of the club and an electronics technician with Seaspan Marine who does radio communication as both a profession and a hobby. The March long-distance call to outer space will be near the culmination of a school-wide effort to make this an unforgettable teaching moment.

### [Dude, Where Are My Sunspots?](#)

by americanthinker.com on January 12, 2014

Welcome to Solar Maximum! Sorry, it turns out to not be much of a solar maximum. Not only is it a weak solar maximum, but it's late. It was supposed to be here back in 2011. But what can we say about natural events? Just when you think you have them figured out, along comes reality and we're back to the drawing board. We have been following the solar cycle, off and on, since March of 2010 here, with a follow up in February of 2013 here. To

summarize, we proposed a hypothesis that (1) as sunspot activity increased global temperatures would increase, and (2) that AGW proponents would hail the increase in temperatures as proof positive that the Earth is warming and that it's our fault because CO2 levels would continue to increase. However, lackluster solar activity ensued, and the Earth stayed pretty much the same temperature. The one may or may not have been related to the other, but since no significant warming resulted the AGW camp has not, as noted back in February, been making any extraordinary claims outside certain circles. Those circles mainly being people who want to believe that the Earth is warming and that it is the fault of humans. But then something happened. A theory emerged in 2013 that the Earth actually is getting warmer, just not in the atmosphere as expected. Rather, the increase is in the deep ocean. The amount of increase is, according to the Discovery.com article cited, "alarming." How alarming? A chart is provided in the cited reference.

### **[NASA Launches Peruvian Satellite Into Space:](#)**

by bernama.com on January 11, 2014

LIMA, Jan 10 (BERNAMA-NNN-ANDINA) -- US space agency NASA has just launched a cube-shaped satellite designed by students and faculty from Peruvian university Universidad Alas Peruanas. The satellite, known as UAP SAT-1, was sent into space inside Orbital Sciences' Antares rocket from NASA's Wallops Flight Facility in Wallops Island, Va. at around 13:00 p.m. (Peru time) Thursday, Jan. 9. The UAP SAT-1 weighs less than a kilogramme and is programmed to return data regarding its status and environment by means of amateur radio broadcasts. Antares will take the satellite to the International Space Station (ISS), from where the satellite will be placed in orbit with the help of a robotic arm.

### **['Radio Pirate' Accused Of Hijacking Police Over the Airways:](#)**

by newschannel5.com on January 11, 2014

MCMINNVILLE, Tenn. - A so-called radio pirate has been accused of hijacking police over the airways. Officials with the McMinnville Police Department said the suspect piped loud rap music into squad cars for weeks, putting the public's safety risk. "I don't think it was very funny," said McMinnville police detective, Todd Rowland. Rowland said someone found a way to tap mostly rap and some country music onto the official radio frequency. During a four week period, the music could be heard playing in every single police squad car on patrol. Officers could not turn off the radio because they had to maintain contact with dispatch. They could still talk to one another, but the music was a huge distraction. "We could have missed emergency calls," said Rowland. Police turned to a local electronics expert to help them track the frequency of the radio pirate. They did locate the suspect as he was sending the signal from his car. They confiscated his ham radio, but he has not yet been arrested.

### **[Exploring Ham Radio In a Digital World:](#)**

by kcur.org on January 10, 2014

With smartphones and Wi-Fi everywhere, ham radios can seem a little dated. However, the machines have quite a following, and they can be lifesavers when disasters strike. On Tuesday's Up to Date, we talk with a ham radio enthusiast about their continued popularity and check in to see how useful they can be for area hospitals.

### **[Sun Unleashes 1st Major Solar Flare of 2014 \(Video\):](#)**

by space.com on January 10, 2014

Tuesday's massive solar flare has forced the commercial spaceflight company Orbital Sciences to postpone the planned launch of a private cargo mission to the International Space Station today. A massive solar flare erupted from the sun on Tuesday (Jan. 7), rising up from what appears to be one of the largest sunspot groups seen on the star's surface in a decade, NASA officials say.

### **[Free Elmer App for New Hams:](#)**

by Charlie Young KY5U on January 10, 2014

Fellow hams, I am announcing a new free web smartphone/Pad app for new hams called E-Elmer. It's free and it can be downloaded as an Android App or "saved to home screen" as an iOS app. See end of article for info.

### **[ARNewsline Report 1900 -- Jan 10 2014:](#)**

by Bill Pasternak (WA6ITF) on January 10, 2014

The following is a QST. Czech hams return to 5 MHz but in limited numbers; APRS helps rescue a ham involved in an automobile accident down-under; NASA offers schools on-line webcast with Kennedy Space Center Director Bob Cabana, KC5HBV; what its like living in the United States radio free quiet zone and sharks that tweet may save lives. Find out the details are on Amateur Radio Newsline report number 1,900 coming your way right now.

## Repeater Information

### Repeater Interference

The 146.955 repeater continues to see interference to existing conversations as well as at random quiet times throughout the day and night. The repeater interference committee needs your help in collecting data. 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.*

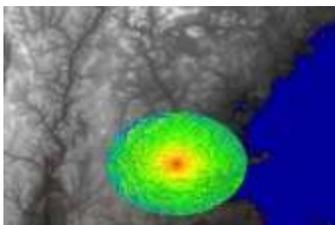
### EmComm events and repeater use

Most everyone knows that the 146.955 repeater is used during times of emergency situations, drills and exercises. Skywarn and the monthly EmComm 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 EmComm 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 EmComm/Skywarn NCS) or Terry-KA8SCP (MEMA Region 1 Communications Officer and Skywarn NCS) . They will be more than happy to talk about these programs with you.



**R**epeater info is now available on the PART [website](#). Check out the links to the summit information as well as coverage and plot plans maps for the WB1GOF repeaters. Complete info on the site can be found at this [URL](#).

## PART Gear

The PART Quartermaster has lots of great PART-ware for sale including 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: Please check with Hugh Maguire-N1QGE, [hulin127@verizon.net](mailto:hulin127@verizon.net), if you need a badge.



## EmComm

**Emergency Communications** – The WB1GOF 146.955 repeater is used on the first Monday of every month (except federal/state holidays) for an EmComm Net 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 Communications Officer  
Hugh Maguire – N1QGE, for the Town of Westford  
Bill Ohm – W1OHM, for the Town of Chelmsford  
Darrel Mallory – K1EJ, North Middlesex ARES

- 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 EmComm nets 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 the EmComm Net Control Stations 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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Our forum is: <http://wb1gof.net/forums/>

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