



# PARTicles

The newsletter of PART of Westford, MA – WB1GOF

*Celebrating 40 years of public service 1975-2015*

June 2015

## President's Column

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- *Andy Stewart (KB1OIQ)*

Yes, it is true that I am a little bit behind when it comes to reading my ham radio magazines. I just ran across this article and thought I'd pass it along. Hopefully, it isn't "old news" to you.

If you haven't yet read the April 2015 issue of CQ Magazine, be sure to read the article written by Mark (K1MGY) which describes his experience with local school children and their high altitude balloon project. Many of you may remember when it was launched, and the WB1GOF 955 repeater was alive with traffic from the fox hunters who were tracking the balloon during its flight. The balloon was temporarily lost, until 1 week later, when the Coast Guard recovered it in the Atlantic Ocean. It is a great story and a great article as well.

Field Day is the largest club event of the year, and it will take place this year at the Concord Rod & Gun Club, in Concord, MA, on June 27 and 28. All are encouraged to attend, whether you are a member or not, or even a ham or not! A lot of hard work has been put into the planning of this event, and I'm sure we're all looking forward to having a great time! Let's hope that we have decent weather. We'll be devoting the entire June meeting to a discussion of Field Day and the finalizing of the plans.

Don't forget about the 13 Colonies Special Event! It will take place on June 30th - July 5th, 2015. I have volunteered once again to be the QSL manager for K2H, and I plan to do a lot of operating as well. With the right skills, it can be fun to be on the other end of the pile up! For more information, please look here: <http://www.13colonies.info>

The ARRL New England Division Cabinet meeting will be happening on July 11th, and I plan

to attend. If you have any issues that you'd like me to bring up at that meeting, please email them to me at your earliest convenience.

I recently purchased a brand new ham radio device called the SM1000. It is a small box which contains a single board computer and Free Software to implement FreeDV (Free Digital Voice). This is an Open Hardware design, with the schematics freely available. One simply needs to plug it into a 12V power source, and then plug it into the microphone and headphone jacks of the radio. Also, a connection for PTT is very helpful. Most of the activity is taking place on 14.236 MHz but other frequencies in the voice portion of the band could be used. The digitized voice sounds very good, and only uses about 1.5kHz of bandwidth. It uses a new algorithm called CODEC2 which was designed for use on HF, but could be used on other bands. One can find videos on YouTube of people using the SM1000, or the equivalent software loaded onto a personal computer. I'm trying to get local hams interested so we could try a QSO on an appropriate frequency, perhaps 6m or 2m. For more information, visit this website: [http://www.rowetel.com/blog/?page\\_id=3902](http://www.rowetel.com/blog/?page_id=3902)

Other things I've been doing lately, besides home maintenance chores, include playing with a regenerative receiver, and making my station run entirely off-grid. I'll share more of those details soon, perhaps at a future PART meeting.

Have a lot of fun!

73 de Andy KB1OIQ

**Next PART meeting: Tuesday June 16<sup>th</sup>**

@1930 – Westford Police station

## Treasurer's Report

### PART Treasury between 21-April '15 & 18-May '15 (As of 19-May '15)

	General Fund	Repeater Fund	Checking Total
Old Balance	\$ 3,883.11	\$ 3,188.09	\$ 7,071.20
Income	\$ 225.00	\$ 232.22	\$ 457.22
Expenses	\$ ( 278.34)	\$ 0.00	\$ ( 278.34)
Net	\$ ( 53.34)	\$ 232.22	\$ 178.88
New Balance	\$ 3,829.77	\$ 3,420.31	\$ 7,250.08

### PART 2015 Membership as of 3-Jun '15

	Individuals (= New for 2015 + Renew for 2015)	Households (= New for 2015 + Renew for 2015)
Full (\$25)*	37 (= 7 + 30)	37 (= 7 + 30)
Senior (\$15)*	38 (= 2 + 36)	38 (= 2 + 36)
Family (\$30)	19 (= 2 + 17)	9 (= 1 + 8)
Student (\$15)	0 (= 0 + 0)	0 (= 0 + 0)
Associate (\$10)	0 (= 0 + 0)	0 (= 0 + 0)
<b>Grand Total*</b>	<b>94 (= 11 + 83)</b>	<b>84 (= 10 + 74)</b>

ARRL members:\* 84 / 89%  
(Including ARRL Life members:\* 8)  
NOTE: \* Starred lines changed since 5-May '15

#### Latest new PART members:

Glenn/KC1BGR (Marlboro)  
Bob/N1BE (Stow)  
Dave/W1WAH (Londonderry NH)

##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

Renew online by PayPal at: [http://www.wb1gof.org/F\\_join/part\\_dues.html](http://www.wb1gof.org/F_join/part_dues.html)

## Your Call EXPIRED?

### How to avoid losing your license...

The USA Callsign database contains about 750,000 listings and at any given moment, approximately 30,000 of these callsigns are expired! Over 1,000 old callsigns are returned to the unused pool each month! <http://www.qrz.com/expired/>



## Upcoming PART Meetings/Events

### June 16<sup>th</sup> 2015

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

### June 27<sup>th</sup> & 28<sup>th</sup> 2015

- PART Field Day - Concord Rod and Gun Club, 74 Strawberry Hill Rd, Concord MA

### July 4<sup>th</sup> 2015

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

### July 21<sup>st</sup> 2015

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

### August 1<sup>st</sup> 2015

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

### August 18<sup>th</sup> 2015

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

### Sept 5<sup>th</sup> 2015

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

### Sept 15<sup>th</sup> 2015

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

## Monthly PART Meetings and Social 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

## Ham Fleas/Events

### Flea at MIT

Sunday - 21 June & 19 July '15

Buyers \$6.00, 9:00AM-2:00PM (\$1.00 discount with flyer:

<<http://web.mit.edu/wlmx/www/swapfest/swapfest-2014.04.pdf>> )

Parking Lot & Garage on Albany St. Cambridge, at Portland St.

<<http://goo.gl/maps/KpTQO>>

<<http://web.mit.edu/wlmx/www/swapfest/buyers-parking.pdf>>

### Links to hamfest websites (partial)

Boxborough MA	NE ARRL Conv	<a href="http://www.boxboro.org">http://www.boxboro.org</a>
Adams MA	N BerkshireARC	<a href="http://www.nobarc.org/hamfest.htm">http://www.nobarc.org/hamfest.htm</a>
Dartmouth MA	SEMARA	<a href="http://www.semara.org/flea.htm">http://www.semara.org/flea.htm</a>
Falmouth MA	FARA	<a href="http://www.falara.org">http://www.falara.org</a>
Feeding Hills MA	MTARA	<a href="http://www.mtara.org">http://www.mtara.org</a>
Framingham MA	FARA	<a href="http://www.fara.org">http://www.fara.org</a>
Marlboro MA	AARC	<a href="http://www.qsl.net/n1em/2015FleaFlier.pdf">http://www.qsl.net/n1em/2015FleaFlier.pdf</a>
Newton MA	Waltham ARA Auction	<a href="http://www.wara64.org/auction">http://www.wara64.org/auction</a>
Rockport MA	CAARA	<a href="http://www.caara.net">http://www.caara.net</a>
S Dartmouth MA	SEMARA	<a href="http://www.semara.org">http://www.semara.org</a>
Wakefield MA	Photographica	<a href="http://www.phsne.org">http://www.phsne.org</a>
Westford MA	NEAntiqueRC	<a href="http://www.nearc.net">http://www.nearc.net</a>
Whately MA	FranklinCARC	<a href="http://www.fcarc.org/news.htm">http://www.fcarc.org/news.htm</a>
Worcester MA	WPI ACM	<a href="http://acm.wpi.edu/swapmeet">http://acm.wpi.edu/swapmeet</a>

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

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

### **2015**

20 June Newington CT NARL @StMary \$5@8 \$15S@6 Quintin KB1EWM 860 383 8203 F+  
21 June Cambridge MA Flea at MIT Mitch 617 253 3776 F  
19 July Cambridge MA Flea at MIT Mitch 617 253 3776 F  
8 Aug Milo ME PARC @Kiwanis George WA1JMM 207 441 6112 A+  
8 Aug St Albans VT STARC @VFW Arn N1ARN 802 309 0666 A+  
16 Aug Cambridge MA Flea at MIT Mitch 617 253 3776 F  
21, 23 Aug Boxboro MA FEMARA NE Conv Mike K1TWF 978 250 1235 A  
30 Aug Adams MA NoBARC @BoweFld 6:30sell 7:30buy Eric KA1SUN 413 743 9975  
5 Sept Windsor CT VR+C Mus 115 Pierson LN @8AM Outdoor John 860 673 0518 +  
13 Sept Ballston Spa NY SCRACES @FG \$10@7 Darlene N2XQG 518 587 2385  
13 Sept Newtown CT CARA @TownHall\$5@8:30 Ron AB1RJ 203 938 7007  
19 Sept Forestdale RI RIAFMRS @VFW \$5/Sp@8 Pete AA1PL 401 639 4484  
19 Sept Fishkill NY MtBARC @QWL DnStCorr Adam KC2DAA 845 849 3666 A+  
20 Sept Cambridge MA Flea at MIT Mitch 617 253 3776 F  
26 Sep Brookline,NH NEARC Antique \$5@8:30 \$10@7:30 Bruce 603 772 7516 W+  
16, 17 Oct Deerfield NH NEARfest XVIII @FG Mike K1TWF 978 250 1235 +  
17 Oct Longueuil PQ CRARivSud \$7@9 \$10/T@6 Noel VE2BR 450 691 2009 R  
17, 18 Oct Wakefield MA Photographica @AmericalCtr ~photo~ John 781 592 2553  
18 Oct Cambridge MA Flea at MIT Mitch 617 253 3776 F  
18 Oct Meriden CT Nutmeg @Sheraton John N1GNV 203 440 4973 A+  
18 Oct Queens NY HOSARC @HoS Stephen WB2KDG 718 898 5599 +  
25 Oct Hicksville NY LIMARC @LevitHall \$6@9 \$20/T Richie K2KNB 516 694 4937 W+  
31 Oct Gails Ferry CT TCARC @FireCo Darryl WA1DD 860 443 7799 A+  
14 Nov Bourne MA FARA @UpperCC VoTech \$5@9 \$10/S@7 Ralph N1YHS 508 548 0422 +  
5 Dec Windsor CT VR+C Mus 115 Pierson LN @8AM Indoor John 860 673 0518 +

### **2016**

6 Feb Springfield VT CVFMA.org @VFW @8-12 Steve N1QDT 802 885 8110 +  
27 Feb S Burlington VT RANVT @HI x14 I89 Mitch W1SJ 802 879 6589 W+  
5 Mar Chicopee MA MtTomARA @MooseLodge @8:30 S@6:30 Mary KB1ME 413 222 1990 +  
6 Mar Westford MA Radio @Regency Antique Bruce 603 772 7516 +  
12 Mar Dayville CT ECARA @StJosephCh \$3@8A \$10/T Peter K1LNK 401 603 1485 +  
25,26 Mar Lewiston ME AARC ME Conv @Ramada @8 Ivan N1OXA 207 784 0350 +  
29,30 Apr Deerfield NH NEARfest XIX @FG Mike K1TWF 978 250 1235  
7 May E Greenbush NY EGARA @FireCo \$6@8 \$6/T@6 Tom KC2FCP 518 272 1494 +  
14,15 Oct Deerfield NH NEARfest XX @FG Mike K1TWF 978 250 1235



**CAN YOU BELIEVE IT, PART IS  
40 YEARS OLD THIS YEAR!**



**Field Day 2015!**

**PART will hold its annual Field Day at the Concord Rod & Gun Club, 74 Strawberry Hill Road, Concord, MA.**

**Antenna setup begins at 2:30 PM on Friday, June 26, and should take about three or four hours. All PART members are welcome to come out and help. If you haven't seen an antenna launched from a cannon, now's your chance.**

**Station setup and checkout begin at 8:30 AM on Saturday, June 27, and operations begin at 2:00 PM and run for 24 hours. Sign up for an operating time with the station leads:**

- **CW:** Bob, W1IS ([rglorioso@me.com](mailto:rglorioso@me.com))
- **Digital:** Steve, W1KBE ([rimsas@corning.com](mailto:rimsas@corning.com))
- **Phone:** Mark, K1MGY ([kmalitt1@gmail.com](mailto:kmalitt1@gmail.com))
- **VHF:** Allison, KB1GMX ([ajp166@verizon.net](mailto:ajp166@verizon.net))

**Station tear-down begins at 2:00 PM on Sunday. The more volunteers we have, the faster we can get it done.**

PART has a great tradition of memorable Field Days, and this year's event should add to the legends. Our experienced crew of station and infrastructure leads is rested and ready, and will be completing operator sign-ups at the June club meeting. As in past years, there will be great food served up by Charlie, W1ADL, Rick, W1RAG, Lela, KB1ACV, and Rich, AB1HD. Lela, KC1ACV, our Public Relations lead has sent invitations to community leaders and the media, and we expect to see many non-ham "drop-ins" who want to see what this great hobby is all about. Bob, KB1SWZ, will again have a satellite station in operation, and if NASA cooperates, a QSO with the International Space Station may be possible.

We'll have a couple of new events as well. For the first time, there will be a fox hunt, so bring your VHF and UHF handheld gear. Andy, KB1OIQ, will be operating a Get-On-The-Air (GOTA) station for new hams and non-hams.

Bob, W1IS, and Alan, W1CCE, will be conducting a Tool Talk on contesting on Saturday before operations begin; this will be a great session for those who want to learn some tricks from experienced testers.

All in all, it's going to be a very full weekend of fun and operating that you won't want to miss – see you there!

## **Field Day FAQs**

1. Why should I come to Field Day? I'm not a contester.
  - You're just the one who should come! Field Day isn't only a contest – it's an opportunity experience all the facets of ham radio. We'll be operating CW, Phone, Digital and VHF stations with a variety of antennas and emergency power, passing message traffic, and educating people who drop by to learn about ham radio operations. We'll even have a satellite station and a fox hunt.
  - If you haven't experienced a contest but think you may be interested, this is your chance to observe and get some training from experienced operators. The Tool Talk on Saturday will explain contesting operations. Our Get-On-The-Air (GOTA) station can give you hands-on contest training in a no-stress environment.
2. I'm a Tech and can't operate HF. Why should I come?
  - You're just the one who should come! You'll be able to operate the GOTA HF station with our Elmers and maybe get an incentive to upgrade your ticket. If VHF is your interest, we'll have a VHF station and a satellite station in operation too.
3. I've heard that the food at Field Day is pretty good. Will it ruin my diet?
  - Yes, it's true that the food is excellent, and there will be plenty of it. If needed, we can assign a "diet-Elmer" to help you control your portions!
4. My XYL/OM/kids/significant-other don't have licenses and will be home alone if I go to Field Day. What should I do?
  - Bring them along! Even without a license, they operate the GOTA station (under expert supervision), participate in the fox hunt, attend the Tool Talk, and have some great food. If you know of any youth groups, school clubs, or other organizations that might be interested in seeing ham radio, invite them too.
5. Do I have to dress up?
  - Although Andy, KB1OIQ, is rarely seen without a jacket and tie, Field Day is a casual event! Shorts and t-shirts are fine. Don't forget your insect repellent.

## **Fox Hunting**

### Urban Fox Hunting

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- *Bob-KB1SWZ & John-KB1MGI*

Well I tried something a little different, an urban fox hunt, no woods to walk through, just side walks in downtown Concord Mass. The fox was hidden in a store window. Next to the transmitter was a stuffed toy fox. This was the final clue. If you were right on top of the radio you may have seen the fox. The employees in the store were more than happy to take part in this event after watching the fox hunting videos on you tube. I did watch Mark, K1MGY-- find the fox as I hid across the street. He entered the store and I followed him in a few minutes later, congrats Mark.

First to find the fox was John KB1MGI

Second was Mark K1MGY

Third was Bob N1BE

And a good effort was put in by George KB1VXH

### John - KB1MGI

This past weekend Bob KB1SWZ placed his fox transmitter in the area of downtown Concord MA and called it an Urban Fox Hunt. The only hint was it is south of the flag pole in Concord Center.

So I headed out early Saturday morning, I figured it would be easier with less traffic and people. While traveling down Lowell Rd from Carlisle I started picking up the signal around the bridge over the Concord River and it got pretty strong. I figured it was somewhere around Keyes Rd parking area. As I approached Concord Center the signal got weaker and faded out in and around downtown Concord. Making a few loops the streets figuring that the fox was being shielded by something I could not get a good signal with the small yagi antenna. The signal was getting stronger as I headed south on RT 62 out of Concord center.

Turning left onto Thoreau St and approaching the Train Station the signal was full scale in the car and the portable on the seat. Stopping in the Train Station parking lot the yagi pointed across the St at some outside tables and chairs and big potted plants. So I checked around the potted plants thinking the fox was inside the planters, no luck. I was parked on Middle St across from the Train Station. The only person that came by was a woman out for a morning walk and I told her I was tracking a signal kind of like a treasure hunt. She said OK, I thought you had a drone in your hand as she kept walking away.

Standing across the street from the Concord Provisions Liquor Store the signal was strong point at the blue US mail box on the corner of the building. I first checked the alley behind the store and the signal dropped. Walking up the mail box the signal was full scale on the 3rd harmonic. I said to myself there is no way it's inside the mail box. As I walked in front of the store at the same corner of the building as the mail box the signal again was full scale on the 3rd harmonic. As I walked across the front of the store to the other side the signal dropped out. I walked back to the right hand corner of the store again and the signal was the strongest again.

The fox transmitter was inside the store and the store did not open until 8 am, I was going to wait around to sign the card. 45 minutes from the first signal heard to find the fox.

So I sent Bob KB1SWZ a text saying, I found it but the store was not open to sign the card. - KB1MGI

### George KB1VXH

My fox hunt story was not successful. I went Sunday afternoon to Concord center and started there. Drove down Walden St and started to hear signal. I got to Everett St. At Playground signal was stronger. I thought for sure it was hidden there. I spent all my time looking by walking around with the HT and earphone. I didn't want to look too suspicious as there were people around. Also there were many signals and lots of metal fences to reflect signals. I was sure it was on top of a metal shipping container. It was 8 foot tall so you can't see what was on top, so I figured it was there. End of my story. I wanted to go look for the others KB1MGI had hidden. I only found one of those. - KB1VXH

### Mark, K1MGY

Well I had already considered (given the "clue") that perhaps the fox would be located at a place that has some association with foxhunting. So first, I thought the FootStock store would be a candidate (lots of walking!). I was nearby that store when we talked. I also had considered Walden St. and the train station, so when you said south, that's exactly where I headed. On the way, the signal strengthened, so I knew I was on the right path.

I parked about 100 meters from the fox location and it took me around 20 minutes to track it down to the store. I did circumnavigate the train station on the off chance it was there, but the signal weakened, so it just \*had\* to be on the street.

The clerks in the store really did a great job of playing dumb. "I thought you were surveying the area for radiation," one of them said. This should have been a clue! As I was standing just 1 meter away from the fox during the conversation, it was me who was clueless.

Bob, KB1SWZ, was watching me the entire time. Perhaps he has a hilarious video of my wanderings and head scratching.

It was a lot of fun, and good I wasn't accosted by the authorities in the process! - K1MGY

Bob, N1BE

When I first got notice of the fix being placed, I did not have my DF gear or much time to hunt. I looked at a map of Concord and noted where there are conservation lands within the described fox area. I then took a quick drive through town Walden Street and Lowell Road looking for signal on my mobile rig. Signals seemed to peak where Nashawtuc Rd crosses the Sudbury River, but not so strong that I was very close to the fox.

I came back Sunday afternoon prepared to hunt on foot. But first I did a little more driving -- East on Main Street to Thoreau Street; did a loop south of the RR tracks, parking close to the Concord Depot because signal was strongest there. Now on foot with a directional antenna, I followed the line of strongest signal to the funeral home, back along the north side of Thoreau St, through alleys and parking lots, Middle and Belknap streets. At this time I did a little PR explaining to a woman and her teenage son what I was doing. (I was entertainment for some people eating ice cream that warm afternoon.) In the alley behind Concord Provisions, lots of signal and mostly pointing towards the store. Finally I decided to enter the store and asked the clerk if there could be a hidden radio transmitter in the store - he led me to the box and I signed in. - Bob Evans, N1BE

Thanks Bob for place your Fox inside a building to make our first Urban Fox Hunt. This was great practice to track down a signal coming from inside a building. - John, KB1MGI



*The ARRL New England Convention  
at the Holiday Inn in Boxborough,  
Massachusetts*

**August 21 - 23, 2015**

TICKETS NOW ON SALE! [Purchase Tickets](#)



**Friday Evening DXCC Dinner  
with Keynote Speaker Jeff Jolie, NM1Y**



**Saturday Evening Banquet with  
Keynote Speaker Gordon West,  
WB6NOA**



From eHam.net News:

### [Columbia Mini Maker Faire -- A Show and Tell of Regional Makers:](#)

by free-times.com on June 7, 2015

Behind every great creator, inventor and prodigy is a young mind hungry for knowledge. EdVenture Children's Museum is hosting its third annual Columbia Mini Maker Faire this Saturday. The event provides a platform not only for makers to show off what they've created, but also for inquisitive minds of all ages to explore the process behind these creations. Drawing inspiration from the national Maker Faire in San Mateo, California, the Columbia Mini Maker Faire is part science fair, part DIY showcase, and it highlights local innovators. Arguably one of Nikola Tesla's most useful inventions was the Tesla coil, a predecessor of the radio frequency coil that allowed for the radio age. The Columbia Amateur Radio Club will give insight into the invention that revolutionized communication. Visitors can make a Morse code bracelet, view QSL cards from all over the world, and learn from experienced ham radio operators.

### [Emergency Communications Drill June 27-28 at Hiawatha Walmart:](#)

by hiawathaworldonline.com on June 6, 2015

On June 27-28, the Hiawatha Walmart will host an emergency communications drill of both the local unit of the National Association for Amateur Radio and the local Kansas National Guard unit. Both civilian and military communication centers will operate side-by-side on the west side of the Walmart parking lot on Saturday to practice radio skills that might be needed in an emergency. On the civilian side, volunteers from the Hiawatha and Falls City Amateur Radio Clubs, along with 35,000 other licensed amateurs throughout North America and the Pacific, will unplug from the grid and demonstrate that they can conduct emergency radio communication operations continuously for 24 hours. They do this by passing along messages to other amateurs in a friendly competition for points. They will operate from 1 p.m. on Saturday to 1 pm on Sunday. On the military side, radio operators for the HHB 2-130th Field Artillery National Guard Unit, will similarly operate long range radio equipment to practice field artillery communications. They will be at Walmart from 9 a.m. to 4 p.m. on Saturday the 28th and will set up a portable Standardized Integrated Command Post System. They will be using the Falcon II(R) AN/PRC-150(C) communications system, which is the most advanced battlefield, Type 1 high frequency radio available today.

### [Propagation Forecast Bulletin #23 de K7RA:](#)

by W1AW Bulletin via the ARRL on June 5, 2015

For seven days from May 28 through June 3, average daily sunspot numbers dropped from 56.1 the previous week to 34.3. Average daily solar flux barely changed from 97.6 to 97.8 over the same two weeks. But both numbers show a rising trend in recent days.

### [Amateur Radio 'Field Day' will Demonstrate Science, Skill, and Service:](#)

by smnewsnet.com on June 5, 2015

Members of the St. Mary's County Amateur Radio Association will take part in the national Amateur Radio Field Day exercise, June 27 -- 28, 2015 at the Hollywood Volunteer Fire Department. Since 1933, ham radio operators across North America have established temporary ham radio stations in public locations during Field Day to showcase the science and skill of Amateur Radio. This event is open to the public and all are encouraged to attend, especially between 2-8 p.m. on June 27 when activities will be set up especially for the public. The event is family-friendly and will feature a Get-On-The-Air (GOTA) station with a Ham Coach who will help you make your own radio contacts! Please do not bring pets (except for registered service animals). For over 100 years, Amateur Radio -- sometimes called ham radio -- has allowed people from all walks of life to experiment with electronics and communications techniques, as well as provide a free public service to their communities during a disaster, all without needing a cell phone or the Internet. Field Day demonstrates ham radio's ability to work reliably under any conditions from almost any location and create an independent communications network. Over 45,000 people from thousands of locations participated in Field Day in 2014. "It's easy for anyone to pick up a computer or smartphone, connect to the Internet and communicate, with no knowledge of how the devices function or connect to each other," said Sean Kutzko of the American Radio Relay League, the national association for Amateur Radio. "But if there's an interruption of service or you're out of range of a cell tower, you have no way to communicate. Ham radio functions completely independent of the Internet or cell phone infrastructure, can interface with tablets or smartphones, and can be set up almost anywhere in minutes. That's the beauty of Amateur Radio during a communications outage."

### **[Two-Day Ham Radio Exercise Coming to North Fort Myers:](#)**

by news-press.com on June 5, 2015

Members of the Fort Myers Amateur Radio Club will participate in the national Amateur Radio Field Day exercise June 27-28 at North Fort Myers Community Center, 2021 N. Tamiami Trail. This event is open to the public. For more than 100 years, Amateur Radio -- also called ham radio -- has allowed people to experiment with electronics and communications techniques, organizers said. This is an opportunity to be on the radio. Operators also provide a public service to communities during a disaster, without needing a cellphone or Internet. Field Day demonstrates ham radio's ability to work under any conditions from almost any location and create an independent communications network.

### **[Ham Radio Ops Play Special Role At Hurricane Center:](#)**

by cbslocal.com on June 5, 2015

MIAMI (CBSMiami) -- Believe it or not, 100 year old technology plays a special role during hurricane season at the National Hurricane Center in west Miami-Dade. They're called amateur radio operators, 'hams' for short and they communicate in ways others can't. "We have a group of about 30 volunteers and they come in here during hurricanes that are anywhere in the Atlantic," said Julio Ripoll, a ham radio op who volunteers his time at the NHC. The NHC relies on data and weather observations for their forecasts and reports. Sometimes, however, weather data can't be transmitted either because there is no internet or the weather is really, really bad. "Many times we basically just fill in the gaps from all the other weather data they get from satellite and air recon, but there are gaps on the surface that they may not have so we fill in those reports," said Ripoll. "We basically take surface reports from other hams that have radio stations and relay them to the forecasters."

### **[Leicester Scientists Develop Space Satellite which Predicts Solar Storms:](#)**

by leicestermercury.co.uk on June 5, 2015

Scientists in Leicester are developing a space weather satellite which will be used to predict disruptive solar flares. Geomagnetic storms cause chaos with power grids, radios and other communication equipment. They can destroy satellites and disrupt GPS data, but they can also create stunning auroras at the Earth's poles - like the Northern Lights. Now, a team of space scientists from the UK, Europe, Canada, America and China are planning to launch the SMILE (Solar Wind Magnetosphere Ionosphere Link Explorer), a satellite which will be capable of tracking solar storms and giving advance warning of their impending strikes.

### **[DX News -- ARRL DX Bulletin #22:](#)**

by W1AW Bulletin via the ARRL on June 4, 2015

This week's bulletin was made possible with information provided by 9M2PJU, N0KV, QRZ DX, the OPDX Bulletin, 425 DX News, The Daily DX, DXNL, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

### **[Just Ahead In Radiosport:](#)**

by The ARRL Letter on June 4, 2015

Just Ahead In Radiosport:

### **[Texas, Oklahoma Ham Volunteers Stand Down Following Spat of Severe Weather:](#)**

by The ARRL Letter on June 4, 2015

Severe storms and flooding in Texas and Oklahoma that extended beyond the Memorial Day holiday weekend kept ARES and SKYWARN volunteers busy or on alert through the rest of May, which now is being crowned as the wettest month on record in both states. Texas received more than 8.8 inches of rainfall during May, while Oklahoma got a whopping 14.4 inches. Wichita Falls, Texas, saw 17 inches of rain during May, while Oklahoma City got nearly 19.5 inches. The resulting flooding and property damage -- with some severe wind incidents thrown in -- caused numerous ARES callouts and SKYWARN net activations.

### **[WX4NHC Reports It's Ready for Hurricane Season:](#)**

by The ARRL Letter on June 4, 2015

WX4NHC, the Amateur Radio station at the National Hurricane Center (NHC) in Miami, reports that it has stood the test and is ready for the 2015 Hurricane Season, which began on June 1 and will continue through November. WX4NHC conducted its Annual Station Test on May 30, at the end of Hurricane Preparedness Week. This marked the 35th year of volunteer public service by the WX4NHC Group at the NHC. WX4NHC Amateur Radio Asst. Coordinator Julio Ripoll, WD4R, said the station was tested on many frequencies and modes, including digital modes, and that all radio equipment and antennas performed well.

### [Lightsail Spacecraft Restored After Being Silenced By Software Issue:](#)

by The ARRL Letter on June 4, 2015

After going silent for a few days, The Planetary Society's LightSail spacecraft has resumed transmitting. A suspected software glitch had caused the satellite to stop sending telemetry back to Earth on the 70 centimeter Amateur Radio band. The communication issue now out of the way, the LightSail team will soon determine when to attempt deployment of the spacecraft's Mylar solar sails.

### [Radio Call Saves SOTA Climber Following Fall:](#)

by The ARRL Letter on June 4, 2015

A Littleton, Colorado, radio amateur and mountaineer was happy to have his handheld transceiver along on May 17 after he slipped and fell from an icy ledge in Berthoud Pass while snowshoeing.

### [British Astronaut to Shares ISS Experience With Students via Amateur Radio:](#)

by The ARRL Letter on June 4, 2015

The UK's first European Space Agency astronaut, Tim Peake, KG5BVI, plans to share his "Principia" mission space adventure with students on Earth via Amateur Radio. He's invited youngsters in his country to contact him while he's onboard the International Space Station (ISS) later this year.

### [Delayed Return of Astronaut Samantha Cristoforetti, IZ0UDF Set for June 11:](#)

by The ARRL Letter on June 4, 2015

Astronaut Samantha Cristoforetti, IZ0UDF, now on an International Space Station duty tour that was extended by about a month, will return to Earth on June 11. Cristoforetti has conducted several Amateur Radio on the International Space Station (ARISS) school contacts during her ISS stay.



## ARRL News

### [US Naval Academy CubeSats Get OSCAR Numbers](#)

Today, June 07, 2015 - **AMSAT** has announced that two US Naval Academy-sponsored CubeSats have been assigned OSCAR numbers. BRICsat now will be known as NO-83, and **PSAT** has been designated as NO-84. OSCAR Number Administrator Bill Tynan, W3XO, made the assignments in response to a request from Bob Bruninga, WB4APR, at the Naval Academy.

“From everything I can determine, these satellites meet all of the requirements for ...

### [It's Museum Ships Weekend!](#)

June 05, 2015 - The 2015 Museum Ships weekend gets under way at 0000 UTC on June 6 (June 5 in US time zones) and continues for 48 hours. More than 100 museum ships are expected to be on the air.

Most museum ships will operate SSB or CW in the General class band segments.

SSB: 3860, 7260, 14,260, 18,160, 21,260, 24,960, 28,360, and 50,160 kHz.

CW: 3539, 7039, 10,109, 14,039, 18,079, 21,039, 24,899, 28,039, and 50...

### [The K7RA Solar Update](#)

June 05, 2015 - For seven days from May 28 through June 3, average daily sunspot numbers dropped from 56.1 the previous week to 34.3. Average daily solar flux barely changed from 97.6 to 97.8 over the same two weeks. But both numbers show a rising trend in recent days.

Predicted solar flux is 125 on June 5, 130 on June 6, 135 on June 7-11, then 130, 120 and 110 on June 12-14, 100 on June 15-16, 95 on June 17-22...

## [Hall of Fame Contester, USC Patron Gordon Marshall, W6RR, SK](#)

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June 05, 2015 - Gordon Marshall, W6RR (ex-W6ITA), of Pasadena, California, died on June 2. He was 95. A top contester of a bygone era, Marshall was a Life Member of the ARRL. An entrepreneur, he was a trustee and generous patron of the University of Southern California, from which he graduated in 1946 with an accounting degree. Marshall grew up in South Pasadena, got his ham ticket in the 1930s, and, during Wo...

## [Another Australian Balloon with a Ham Radio Payload Circumnavigates Earth](#)

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June 04, 2015 - The circumnavigation of another party-type foil balloon from Australia has demonstrated that having one circle the Southern Hemisphere is no fluke. Andy Nguyen, VK3YT, launched his PS-46 balloon, which carried an Amateur Radio payload, on May 25. The balloon completed the trip on June 4. Nguyen's earlier **PS-41 balloon** was the first such balloon to circle Earth.

"This time it was in the right pos...

## [Hurricane Watch Net Sets On-Air Anniversary Celebration](#)

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June 03, 2015 - The Hurricane Watch Net (**HWN**) will celebrate its 50th anniversary on the air, June 13-14. HWN members will be using the call sign WX5HWN, operating on 14.325 MHz but with stations active on or near 7.268 MHz as well.

"Our net control stations located around the continental US, eastern Canada, the Caribbean, Mexico, and Honduras will all use WX5HWN as we pass the virtual baton from member to membe...

## [New QST QuickStats Poll Posted](#)

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June 01, 2015 - This month's QuickStats poll has been posted! Check the **QuickStats page** at [www.arrl.org/quickstats](http://www.arrl.org/quickstats) and answer these questions . . .

Have you ever tried to operate on the HF bands from your hotel room when traveling?

Have you ever deliberately awakened at dawn just to chase DX on the low bands?

What is your forecast for propagation conditions during Solar Cycle 25?

Do you use software to track Amate...

## [It's Alive! LightSail Spacecraft Restored After Being Silenced by Software Issue](#)

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June 01, 2015 - After going silent for a few days, **The Planetary Society's** *LightSail*<sup>™</sup> spacecraft has resumed transmitting. A suspected software glitch had caused the satellite to stop sending telemetry back to Earth. The communication issue now out of the way, the *LightSail* team will soon determine when to attempt deployment of the spacecraft's Mylar® solar sails.

"Our *LightSail* called home! It's alive!" The Pl...

## [WX4NHC Reports It's Ready for Hurricane Season](#)

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June 01, 2015 - **WX4NHC**, the Amateur Radio station at the National Hurricane Center (NHC) in Miami, reports that it has stood the test and is ready for the 2015 Hurricane Season, which began on June 1 and will continue through November. WX4NHC conducted its Annual Station Test on May 30, at the end of Hurricane Preparedness Week. This marked the 35th year of volunteer public service by the WX4NHC Group at the N...

## [HEX-BEAM® Manufacturer Traffie Technologies Shutting Down](#)

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June 01, 2015 - Traffie Technologies, the Massachusetts-based family business that has pioneered and manufactured the HEX-BEAM line of compact rotatable wire beams, is closing its doors.

“This is to inform everyone that we are closing down production of the HEX-BEAM®,” an announcement on the **HEX-BEAM website** said. The company’s principal, Mike Traffie, N1HXA, has indicated that he is open to having someone els...

## [Delayed Return of Astronaut Samantha Cristoforetti, IZ0UDF, Set for June 11](#)

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May 30, 2015 - Astronaut Samantha Cristoforetti, IZ0UDF, now on an International Space Station duty tour that has been extended by about a month, will return to Earth on June 11. Cristoforetti has conducted several Amateur Radio on the International Space Station (**ARISS**) school contacts during her ISS stay. In early May, NASA and its international partners postponed the return of Cristoforetti, astronaut Terr...

## [LightSail CubeSat Stops Transmitting](#)

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May 29, 2015 - **The Planetary Society** is blaming a software glitch for causing its *LightSail-A* CubeSat to go dark, but the organization’s satellite team is hoping the situation is temporary and that it can reboot the CubeSat’s onboard computer. In a lengthy **blog post**, the Planetary Society’s **Jason Davis** said the *LightSail* mission “is paused, while engineers wait out a suspected software glitch that has silence...

## [The K7RA Solar Update](#)

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May 29, 2015 - This week the average daily sunspot number dropped 36 points to 56.1, and average daily solar flux was down 25.7 points to 97.6. Geomagnetic numbers indicated more stability than the previous week (May 14-20) with average daily planetary A index declining from 10 to 4.4, and mid-latitude A index down from 9.7 to 5.

The latest forecast from NOAA/USAF has solar flux at 90, 95, 100, 105 and 110 on ...

## [Radio Call Saves SOTA Climber Following Fall](#)

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May 28, 2015 - A Littleton, Colorado, radio amateur and mountaineer was happy to have his hand-held transceiver along on May 17 after he slipped and fell from an icy ledge in Berthoud Pass while snowshoeing. Summits On The Air (**SOTA**) enthusiast Brad Byland, WA6MM, said he’s been climbing and mountaineering for many years now and never before came this close to “a possible life-ending disaster.”

“I’m doing fine...

## [Hams Invited to Test APRS on Duchifat-1 CubeSat](#)

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May 28, 2015 - The **Herzliya Science Center** is inviting stations with the ability to send compressed APRS packets to take part in testing the **Duchifat-1 CubeSat**, **launched almost 1 year ago** by high

school students in Israel. The satellite will collect packets worldwide and downlink them from time to time over the Herzliya Science Center's ground station.

Participants must **register** in advance to have their packet...



Latest Amateur Radio News from around the world  
URL: <http://www.southgatearc.org>

## [Tracking and Receiving the LightSail CubeSat](#)

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Jason Davis @jasonrdavis reports that the LightSail CubeSat is operational again

## [Return to Earth of Radio Ham on TV](#)

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The departure and return to Earth of ISS astronaut Samantha Cristoforetti IZ0UDF will be broadcast on NASA TV during June 11

## [A program to assist new and inexperienced radio hams](#)

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Etienne Naude, ZS6EFN, approached the SARL President Fritz Sutherland, ZS6SF, with a proposal of starting a Rookie Radio Amateur Program in South Africa

## [Russian DOMINO activity](#)

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On June, 12th, 2015 the Russian Digital Radioamateur Club invites to celebrate our national holiday the Day of Russia to play with colleagues in 'Russian DOMINO' - the name of our new radio event

## [Tom W5KUB is available to give a talk at your radio club](#)

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Tom W5KUB of Dayton Hamvention webcasting fame is willing to give a club talk using Skype audio/video to any radio club in the world

## [16th IARU Region 1 Youth ARDF Championships](#)

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The 16th IARU Region 1 Youth ARDF Championships (EYAC) took place June 4-7, 2015 in Zamość, Poland

## [Propagation Report from Hannes Coetzee, ZS6BZP](#)

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Hannes Coetzee, ZS6BZP, reports that the expected solar activity will be at low levels

## 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 adult 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: \$9.00 (new price effective March 2015)*



Copyright WB1GOF,  
Robert Schmeichel  
2011



Copyright WB1GOF,  
Robert Schmeichel  
2013

## Repeater Information

### Repeater Interference

The 146.955 repeater periodically has had interference to in-progress 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.*

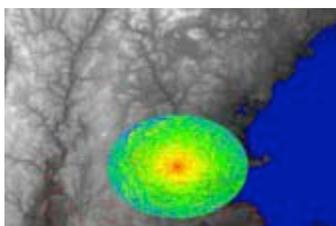
### EmComm events and repeater use

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 Terry-KA8SCP. All requests for repeater use can be initiated by email to [info@wb1gof.org](mailto:info@wb1gof.org).



**R**epeater propagation info is 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 & 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. 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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This month's editor: Terry Stader – KA8SCP

PART official mailing address is:  
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Our website is: <http://wb1gof.org>  
Our forum is: <http://wb1gof.net/forums/>  
Contact us at: [info@wb1gof.org](mailto:info@wb1gof.org)  
Follow us on Twitter: [www.twitter.com/wb1gof](http://www.twitter.com/wb1gof)  
Like us on Facebook: [www.facebook.com/wb1gof](http://www.facebook.com/wb1gof)



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