



The newsletter of PART of Westford, MA – WB1GOF

PAR**T**icles

October 2013

President's Column

- *Andy Stewart (KB1OIQ)*

I'd like to congratulate our recently re-elected members of the PART Board of Directors: Rich (AB1HD) Vice President, Alan (W1AHM) Treasurer, Steve (WA1KBE) Secretary, and Rick (W1RAG) Director-at-Large. I'd also like to thank the club for their confidence and support.

Fox hunting has been a very popular activity in the club in recent weeks. John (KB1MGI) has put a lot of effort into hiding foxes and organizing activities to help new and experienced fox hunters hone their skills. On occasion, foxes have also been hidden by me and Russell (KB1UKU). As people's skills improve, there's a push to be more devious when hiding the fox, but we're trying to balance this with the needs of less experienced fox hunters. Toward that end, we recently held an event where the fox location was told to everybody in advance, to eliminate lots of driving. On arrival, the fox hunter still needs to isolate the precise location while walking. We hope this type of activity appeals to a wider audience. Please send any feedback to either me (kb1oiq@arrl.net) or John (kb1mgi@arrl.net).

In early October, we had 13 volunteers (including myself) for our Grace Race public service event. This 5 mile run/5K walking event has been sponsored for 10 consecutive years by the Grace Community Church in Chelmsford to raise money for Kenyan orphans. This year, there were 3 situations we helped resolve. In one case, we reunited a separated child with his mother. We helped an injured runner get transportation back to the church, and also helped a disabled motorist. We had our eyes and ears every

1/2 mile on the course, coupled with two guys who were "bicycle mobile". I'd like to thank the following hams for their volunteer service during this event: Dave (W1IR), Corey (KB1WIT), Peter (KB1PBA), Tim (KC1AJJ), Kim (KB1KYS), Tim (WoTJP), Kevin (KB1KTR), Dale (KB1ZKD), Ed (KB1HLX), Jon (N1ILZ), David (KG1H), and Rich (N1YLX). The Grace Community Church has extended their sincere thanks for our efforts.

Pumpkin Patrol is coming soon! An event with a long history in this club, Pumpkin Patrol happens on Halloween evening. Volunteers drive the streets of Westford, or may park at spots of potential mischief, and report any unusual activity to the Westford Police. We become the extended eyes and ears for the local police. Our club has a ham radio setup in the police department in a room right next to the dispatcher, and such reports are delivered quickly. Alan (W1AHM) has stepped forward to be the event coordinator (thanks, Alan!). If anybody is interested in volunteering, please contact Alan (w1ahm@arrl.net).

Planning is well under way for our annual Christmas/Holiday party which takes place on the third Tuesday in December. We don't have a meeting on that evening, since we're all at the party! :-). Hugh (N1QGE) is our party chairman, and he could use a couple of volunteers to help with this event. Volunteers would be helping before and/or during the event. A lot of effort goes into this very popular club event, and the help would be very much appreciated. Please contact Hugh (hulin127@verizon.net).

73 de Andy KB1OIQ

Next PART meeting: Tuesday October 15th

@1930 – Westford Police station

NVARC QSL sort Oct 17th at 7:30PM at the Pepperell Senior Center. As usual, pizza and soda will be served afterwards.



Treasurer's Report

PART Treasury between 20-August '13 & 16-September '13 (As of 12- September '13)

	General Fund	Repeater Fund	Checking Total
Old Balance	\$2,842.52	\$2,398.82	\$5,241.34
Income	\$ 152.00	\$ -	\$ 152.00
Expenses	\$ (113.01)	\$ -	\$ (113.01)
Net	\$ 38.99	\$ -	\$ 38.99
New Balance	\$2,881.51	\$2,398.82	\$5,280.33

PART 2013 Membership as of 10-October '13

	Individuals (= New for 2013 + Renew for 2013)	Households (= New for 2013 + Renew for 2013)
Full (\$25)*	41 (= 11 + 30)	41 (= 11 + 30)
Senior (\$15)*	37 (= 3 + 34)	37 (= 3 + 34)
Family (\$30)	21 (= 4 + 17)	10 (= 2 + 8)
Student (\$15)	0 (= 0 + 0)	0 (= 0 + 0)
Associate (\$10)	0 (= 0 + 0)	0 (= 0 + 0)
Grand Total*	99 (= 18 + 81)	88 (= 16 + 72)
ARRL members*:	90	
ARRL Life members*:	10	

NOTE: * Starred lines changed since 3-September '13

##To pay dues##

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

-or-

Club Meeting, Westford P.D., 7:30PM, 3rd Tuesday

Latest new PART members:

Erving/KB1YDO (Lowell)

Upcoming PART Meetings/Events

October 15th, 2013

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

October 31st, 2013

- Pumpkin Patrol 6:00 -10 p.m. Westford Police station

November 2nd, 2013

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

November 19th, 2013

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

December 7th, 2013

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

December 19th, 2013

- NO PART Meeting, Holiday Buffet instead. 6:00 -9 p.m. Yangtze River 584 King Street (Route 110) Littleton

Monthly PART Events

- Every Sunday, 8 PM – PART Net on 146.955 repeater
- Every 3rd Tuesday, 7:30 PM – PART Meetings at Westford Police station
- Every 1st 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>

2013

13 Oct Meriden CT Nutmeg @Sheraton was Wallingford John N1GNV 203 440 4973 +
13 Oct Queens NY HoSARC ** NEW DATE ** Stephen WB2KDG 718 898 5599 A+
19,20 Oct Wakefield MA Photographica @AmericalCtr ~photo~ John 781 592 2553
19 Oct Longueuil PQ CRAR-S \$7@9 \$10/T@6 Martin VE2DNF 450 466 2810 R+
20 Oct Cambridge MA FLEA at MIT Nick 617 253 3776 F+
26 Oct Gales Ferry CT TCARC Auction @FireCo @10 Darryl WA1DD 860 443 7799 +
27 Oct Hicksville NY LIMARC @LevitHall Richard K2KNB 516 694 4937 +
2 Nov Londonderry NH IRS \$3@8 \$15/T Chris KB1QVM 603 434 6137 F+
9 Nov Bourne MA FARA @UpperCC VoTech \$5@9 \$10/S@7 Ralph N1YHS 508 548 0422 +
30 Nov Windsor CT VR+C Mus 115 Pierson LN @8AM Indoor John 860 673 0518 +

2014

22 Feb S Burlington VT HAM-CON @HI I89x14 \$8@8 \$15@6 Mitch W1SJ 802 879 6589
15 Mar Dayville CT ECARA 8A @StJosephCh Paul KE1LI 860 928 5147
28,29 Mar Lewiston ME AARC ME Conv @Ramada @8 Ivan N1OXA 207 784 0350
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+

July 17-20, 2014 -- Hartford, Connecticut



In the News

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

More information coming soon.



**PART
PUMPKIN
PATROL –
OCTOBER 31**



Teaser: “Bringing on the BACoN”

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 1st 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 ****CHANGED****

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

Member Feature Article

MS Challenge Walk

- **Mark Richard-K1MGY**

Many of us have participated in Amateur Radio public service activity. The typical scenario: a day with our HT at the Boston Marathon, or a few hours communicating for a parade. Imagine something a little more intense... 3 days, 750 participants, 200 volunteers, and 150 miles on a bike. This just begins to describe my remarkable experience at the MS Society Challenge Walk on Cape Cod during the first week end of September, 2013.

Multiple Sclerosis is a disease with a wide range of symptoms and impacts. Many have MS and live without the paralysis and pain that others suffer. Especially



MS Challenge Walk
Cape Cod
6 - 8 September, 2013

difficult is the unpredictability of MS. Each day those with MS carry the potential for sudden and severe paralysis, and even death. Such is a burden which can lay waste to the human spirit.

The National MS Society and its State Chapters has grown over many years as an effective clearinghouse of research, advocacy, and support for MS sufferers, their families and friends. There are no cures for MS, but treatments and supportive technology are in place that can make living with the disease possible. To achieve “A world free of MS”, the Challenge Walk is one of many funds raising events the MS Society organizes. Each event is an opportunity for those with and affected by MS to gather in support of one another, but the 50 mile 3-day Challenge Walk is by far the most complex to organize and surely the most difficult for participants and volunteers to complete. Imagine walking 20 miles the first day, 20 the second, and ending in a 10 mile route on the third, along the beautiful Cape Code bikeway between Hyannis and extending to Eastham and the coast. I’ve participated in prior MS events, each time serving on a bicycle, and was therefore familiar with the MS Society, the particular needs of participants, and how the communications operation works. But, as I heard from several hams prior to the 3-day event, “This is different. You have to experience it to understand it”. They are right. And now my trouble is I can’t quite describe it sufficiently for you. But I will try!



Three days, 50 miles

Much of the Challenge Walk experience is a creation of the competent and compassionate core of volunteers and MS staff who, year after year, make this walk a success. What comprises success is safety, and this – from my bicycle seat – is a challenge well met. Mix 750 walkers with roadways, vehicles, rough surfaces, and although pristine- bikeways with their own hazards such as speeding cycles and difficult road crossings - and then add unpredictable weather. This is a brew offering many opportunities for trouble. Remarkably, each and every year, the “safety team” of which we are all members turns out a stellar performance. I had but one medical issue to preside over, and it was efficiently and successfully handled by our medical and SAG responders.



Jim Bradley and one of the MS Staff



Ross Chapman (right) with buddy

My assignment turned out to be a real gift: lead support cyclist on each day of the walk. Another ham, Jim Bradley KB1JKJ and his bride, Donna, followed the last walkers. Jim and Donna were on a rather nifty tandem bicycle, equipped with a solidly-mounted mobile rig, APRS, batteries, first aid supplies, water, snacks, and tools. Jim estimates about 400 pounds in total.



Jim and Donna Bradley



My “intrepid” mount

My mountain bike was also 2 Meter APRS equipped. The mast (see photo) supports a GPS antenna and a 2M mag mount for the APRS transmitter (mounted on the bike frame). I ran a Yaesu FT60 portable with gain antenna and a hands-free headset, backed up with a Wouxun portable. I used APRS Droid, an application for my mobile phone, as an adjunct in case the 2 Meter APRS failed. All this, powered by a lead-acid sealed battery (note to self: get something lighter next time!) To my surprise, both APRS methods sent consistent and frequent GPS coordinates to the APRS network for use by our net control.

Augmenting APRS was a moving map display which ran on a spare mobile phone (rendered with Open Street Maps) which was mounted in a clear pouch and attached to the handle bars. This displayed my location along the route and helped answer a frequent question, “how far to the next rest stop?” Finally, as a backup I carried a printed map and daily Queue Sheet which described every point on each day’s route. Turns out it was used more than all the fancy technology. Amazing how that works.

In summary, 100 pounds of gear, 30 pounds of bike, and 150 pounds of me.



Bike Team at start on first day



One of the mystic motor crew

My participation in the Challenge Walk was far more than Amateur Radio public service communications. Most of the communicating was of the eyeball variety between volunteers and the participants. Everyone was keen to look after safety as a prime directive, but it soon became obvious that the entirety of this event – a statement of human courage and hope – was about our individual journey and an exercise in supporting one another along our own challenging walk through life. Extraordinary to consider is this: participants raised money, but they didn’t have to walk, even a mile. Yet the whole idea was to walk; to push through the pain and disability, and in so doing experience physically and emotionally what it means to be supported in every step. I do not have MS, but discovered my own challenges, and the support and compassion was there, every mile, and every moment. As I felt

supported, it was easy and natural to extend this to the walkers, opening my eyes and heart along the way.



The SAGs, Bike Team, Rest Stop, Medical, Team Support crews were plentiful on all the routes over the three days. The support did not end upon our arrival at “base camp”, the Brewster Sea Camps facility. For here we found food, housing, entertainment, and even a massage for sore muscles, all made available for over 1,000 of us. I must single out the remarkable performance turned in by the 20-unit bicycle team, all mobile phone equipped and coordinated. Led by Alan Loiselle, this team was ubiquitous, and along with the motor crew (motorcycles and SAG vehicles), were just where they were needed at the right time. This is a tribute to the extraordinary planning and applied experience that goes into this event.

A key part of my job was scouting ahead of the lead walker to locate and report safety concerns. On several occasions these became apparent and within minutes of my call to our Net Control one of the motor crew arrived to handle it. Were these people psychic? Their appearance seemed of mystical origin. Later I found out each of my “discoveries” had been understood long ago: the response was in the plan. In future, I still won’t assume something’s covered, but will approach issues with consideration that there’s more planning than I may first realize.

Our NCS for the three days, John Mahon, N1PYN, was the voice that glued everything together. More than offering essential orchestration and coordination, John’s every transmission sent a message of confidence to all of us in the field. His competence and performance was inspiring and served up some goals which I should wish to match.

Although not a spring chicken, I was determined to take on the role missed in younger days: that of “geeked-out”, physically fit, and mentally alert radio-head on wheels. I’m in reasonable shape, so considered doing 20 miles a day easy. However, my assignment resulted in an average of 50 miles a day, as considerable back and forth patrol was the routine. So at first day’s end everything hurt and I walked funny. At the end of day 2, after immersion in the community of MS, nothing hurt and I still walked funny. And by day 3, I didn’t care if anything hurt nor that I had a rather wide stance, for I had moved from over-confidence to aching muscles and then to compassion and perspective. Next time getting out of bed I will remember those who cannot.

Mostly I will remember, and hold with respect in my heart, the special core of Amateur Radio and medical volunteers into whose community I was so graciously welcomed. The bonds that formed are ongoing, and leave me in anticipation of working and supporting such a great effort again next year.





**Brenda Barbour (MS), Kathy Savage KB1LYJ (Medical/Ham),
Rick Savage KB1LPW (Ham/SAG) and Brittany Collins KB1ZPS (Medical/Ham)**

Amateur Radio public service can be far more than talking on the radio. In this event, all the technology went to the periphery. I discovered that the heart of the matter is what you bring of yourself, and the welcoming and supportive team into which you become a member. Personal growth and satisfaction is to be found along your own journey of challenge. It's waiting to be experienced.

I hope these words are encouraging and that you might consider how your Amateur Radio skills can be of greater value than you ever imagined.

The MS Challenge Walk is seeking volunteers for next year. Visit www.nationalmssociety.org for details, or contact me and I'll send you in the proper direction.

Mark Richards
K1MGY
K1MGY@arrl.net
617 592 4392

Photo credit: National MS Society; Mark Richards

Ham Exam

November 13, 2013

Sponsor: Billerica ARS

Date: Nov 13 2013

Time: 7:00 PM (Walk-ins allowed)

Contact: Gary F. Frascarelli

(978) 453-1100

Email: w1gff@arrl.net

VEC: ARRL/VEC

Location: Billerica Public Library

15 Concord Road

Billerica MA 01821-2553

PART Special Events – Holiday Dinner

Are you a new PART member? Are you planning ahead?

.... Here is a Head's UP! Save the date



Members and a spouse / guest are invited to:
The PART winter holiday Dinner

December 17 2013

Cocktail Hour Begins at 6:01pm

Buffet Dinner from 7:00 – 7:59 pm

Activity from 8:00pm to 9:14pm

\$20.00 per person Cash only at the door for buffet - Cash Bar

Yangtze River Restaurant

<http://www.yangtzeriverlittleton.com/>

584 King Street (Route 110) Littleton, MA 01460 Phone: (978)
486-0500



Yes.... this is the third Tuesday of the month. This dinner party takes the place of our regular December club meeting.

PAVE PAWS RADAR SYSTEM

Mission

The U.S. Air Force maintains five PAVE Phased Array Warning System (PAWS) Early Warning Radars (EWR). These radars are capable of detecting ballistic missile attacks and conducting general space surveillance and satellite tracking. The acronym PAVE is a military program identification code.

They are able to detect and track both intercontinental and sea-launched missile threats. Early warning and attack characterization data is sent to the United States' Missile Warning and Space Control Centers, the U.S. National Military Command Center and U.S. Strategic Command. Satellite tracking data is sent to the Joint Space Operations Center (JSpOC) for processing.

Three systems have been modified to Upgraded Early Warning Radar (UEWR) status. They are located at Beale Air Force Base, Calif., Thule Air Force Base, Greenland and Fylingdales, England. The Fylingdales system is operated by the British Royal Air Force. The UEWR systems have a co-primary mission to provide missile tracking data to the U.S. Missile Defense Agency (MDA) GMD Fire Control Center (GFC/C).

The other two systems are located at Cape Cod Air Force Station, Mass., and Clear Air Force Base, Alaska.

Features

The unique aspect of the radars is their phased array antenna technology. The systems differ from mechanical radars, which must be physically aimed at an object for tracking and observation. The phased array antenna remains in a fixed position. Phased array antenna aiming, or beam steering, is done in millionths of a second by electronically controlling the timing, or phase, of the incoming and outgoing signals.

Controlling the phase through the many segments of the antenna system allows the beam to be rapidly projected in different directions. This allows interweaving of tracking pulses with surveillance pulses, allowing tracking of multiple targets while maintaining the surveillance responsibility.

Background

A phased array antenna, as with any other directional antenna, will receive signals from space only in the direction in which the beam is aimed. The maximum practical deflection on either side of antenna center of the phased array beam is 60 degrees. This limits the coverage from a single antenna face to 120 degrees. To provide surveillance across the horizon, the building housing the entire system and supporting the antenna arrays is constructed in the shape of a triangle. The two building faces supporting the arrays, each covering 120 degrees, will monitor 240 degrees of azimuth. The array faces are also tilted back 20 degrees to allow for an elevation deflection from three to 85 degrees above horizontal. The Fylingdales system uses a three-faced phased array for a full 360 degrees of azimuth coverage.

The radar system is capable of detecting and tracking multiple targets that would be indicative of a massive missile attack. The system must rapidly discriminate between vehicle types, calculate their launch and impact points, and perform scheduling, data processing and communications requirements. The operation is semi-automatic and requires highly trained personnel for monitoring, maintenance, prioritization, scheduling, and as a final check of the validity of warnings. Four different computers communicate with each other from the heart of the system, which relays the information to Cheyenne Mountain Air Force Station and Missile Defense forward users.

(Source: <http://www.afspc.af.mil/library/factsheets/factsheet.asp?id=3656>)



PAVE PAWS is an Air Force Space Command radar system operated by three 21st Space Wing squadrons for missile warning and space surveillance. PAVE PAWS radars are located at Cape Cod Air Force Station, Mass., Beale AFB, Calif., and Clear AFS, Alaska.

Why is D-Star so complicated and confusing?

By Hank von Dahlen, KI4UMX

The short answer is *it's not!*

D-STAR radios are programmed in the same way as all current radios, either by keystroke entries or with software. If you can program and use a NON D-STAR radio, you can program and use a D-STAR radio. The user manual is both complicated and confusing -it tells you *how* to do something, but not *why*, and shows how D-STAR is used in Japan. Fortunately the rest of the world uses a much simpler linking method called DPLUS. So close the user manual and put it in a safe place (it does tell you how), then go to the D-STAR information web site (see links at the end of this document) and read all about it.

When you use Digital Voice (DV) mode there are four (8 digit) data fields used by the D-STAR system. These data fields tell the repeater controller and gateway what to do with your transmission. The D-STAR Calculator (see links) will tell you exactly what to put in each of these fields, but in general the first two are *memory banks* that can hold multiple (menu selectable) values. MYCALL is used for both simplex and repeater operation, the others are for Repeater operation.

MYCALL or MY -This is always your callsign -in DV mode your radio sends this every time you transmit. There is also an optional four digit information field -some leave it blank, some put their name, etc. If more than one Ham uses a radio, there is room for multiple callsigns -be sure that yours is selected.

YOURCALL or UR -This is where most of the confusion comes in -For most users, most of the time this will always be CQCQCQ. This is where the D-STAR Calculator proves its value in determining what needs to go here if you want to do something different. You can Pre-Install many of the DPLUS linking commands that you think you might want to use, and use the menu to select them as needed. Always return to CQCQCQ immediately after you send a DPLUS command. There are also some Icom D-STAR commands that work differently -The D-STAR calculator also addresses these.

The next two data fields *almost never* change. They deal with the repeater you are using, and are usually programmed in at the same time you program in the frequency, offset, etc.

REPEATER1 or RPT1 or R1 -The callsign of the repeater you are transmitting to and the Port (A, B, or C). The port designator is the RF module for a particular band and must be in the 8th position -use spaces as necessary. D-STAR Repeater Ports in the US and most areas of the world follow the naming convention:

- Port A = 1.2Ghz
- Port B =UHF
- Port C =VHF
- Port G = Internet Gateway

REPEATER2 or RPT2 or R2 -Same as above, but use Port G -This routes your packets to the Gateway even if you are talking local.

Most D-STAR repeaters in the USA have Gateways. The few that don't will probably eventually get one. They all have 1, 2, or all three of the other Ports or RF modules. When you key up on a repeater, the Repeater Controller (computer) routes the signal based on information contained in UR, RPT1, and RPT2. By putting Port G in RPT2, you are telling the Controller to also send your transmission to the Internet Gateway - this is important when using DPLUS Linking.

Beyond the Gateway, there are other Repeaters, Reflectors, and DV-Dongle users. DPLUS Linking is a widely used software application which simplifies connection between these entities. Because of Bandwidth constraints, each Repeater can only handle a small number of internet connections.

Reflectors are conference bridges which overcome this problem, allowing dozens of repeaters to link up. Anything transmitted on any repeater can be heard on all linked repeaters. Reflector 1C has become the World Wide English language place to make contacts, with Repeaters from Europe, Australia, Canada, etc. Other Reflectors are dedicated to other languages. D-STAR information web site has a list of

which is which, but don't expect to hear conversations 24/7 like our local repeaters, the reflectors are quiet a lot of the time. Many repeaters stay linked to a reflector most of the time so you can hear and join in a conversation. This is a decision that must be made by the administrator of each repeater, and the ability to Link/Unlink may be restricted.

Links

D-STAR information web site - <http://www.dstarinfo.com/> - This site has information on all aspects of D-STAR.

D-STAR Calculator - <http://www.dstarinfo.com/repeater-lists.aspx> - A very helpful tool for learning to program your D-STAR radio to access repeaters and link to others.

D-STAR Repeater Directory - <http://www.dstarusers.org/repeaters.php> - This is a sortable list of D-STAR Repeaters - it's worth exploring the different categories on the left of the page

Last Heard - <http://www.dstarusers.org> - This is a list of D-STAR stations heard in the last few hours on any of the Gateway equipped repeaters. The callsign of the station and the repeater where they operated is shown.

Amateur Radio News

Southgate Amateur Radio News

- 10 October [Tony's 10 Metre Band Report](#)
 - [IOTA news from the Deutscher Amateur Radio Club](#)
 - [Special event station GB6SPD](#)
 - [ARISS ham radio contact scheduled with school in Senegal](#)
 - [Raspberry Pi at RSGB Convention](#)
 - [MacLoggerDX version 5.49 released](#)
 - [GB1BNB](#)
 - [Radio Hams Say Hi To Juno](#)
 - [Training Forum at RSGB Convention](#)
 - [UKHAS Arctic Challenge](#)
- 9 October [Juno spacecraft to buzz Earth on October 9th](#)
 - [STRaND-1 talk at RSGB Convention this Sunday](#)
 - [Rosebud RadioFest 2013](#)
 - [Amateur Radio World Castles Award](#)
 - [ICQ Amateur Radio Podcast](#)
 - [Wisconsin - Ham Radio Hotbed](#)
 - [Guide to Digital Signal Processing](#)
 - [Radio hams to say 'HI' to Juno on 10m](#)
 - [Russian vocoder Yakhta back on 21 MHz](#)
 - [SARL@Home](#)
 - [Special event station II8IDXC](#)
 - [Curacao ops needed](#)
 - [Successful ARISS contact in Gdansk, Poland](#)
- 8 October [Ofcom propose legalising 27 MHz SSB](#)
 - [UK ham radio licenses hit new high](#)
 - [IOTA news from OPDX](#)
 - [DXCC Country/Entity Report](#)
 - [Ofcom's Paul Jarvis to speak at RSGB Convention](#)
 - [Special event station GB0TWY](#)
 - [Celebrating the first-ever UK - NZ radio contact](#)

[Round Island Lighthouse](#)
[Yaesu FTM 400DR review](#)
[Tuning out: Analogue radio to disappear by 2018](#)

- 7 October [Monday October 7, ARISS contact scheduled with school in Cesano Maderno, Italy](#)
[C82, Mozambique DXpedition](#)
[40th anniversary of UK Independent Radio](#)
[Spacecraft goes into lunar orbit](#)
[HamRadioNow Episode 100: Big Whoop!](#)
[CY0P DXpedition update](#)
[W700 Contribution Challenge](#)
[Robert Ford AC4RF SK](#)
- Sun 6 October [Propagation Report from Hannes Coetzee, ZS6BZP](#)
[Antique Wireless Association AM/SSB Valve QSO Party](#)
[HABEX gets the nod from CAMU](#)
[Ham Radio key during disasters](#)
[FCC issues warnings for Amateur Radio infractions](#)
[DTX1 DVB-S Digital TV](#)
[AMSAT Space Symposium - Procrastinator alert!!](#)
[UKHAS Listener Network](#)
- 5 October [Radio hams honored for community preparedness](#)
[Curaçao accepted for T/R 61-02](#)
[Ham Radio Club has Hamfest and Tailgate](#)
[Shutdown upends Ham Radio buffs' trip marking massacre](#)
[ARISS contact on Echolink and IRLP](#)
[Leave the HAMFEST with a new radio!](#)
[Australian D-STAR on 40 metres](#)
[Propagation de K7RA](#)
[Learning is the key to everything](#)
[Mellish Reef DXpedition](#)
- 4 October [Radios in decline among young](#)
[Tony's 10 Metre Band Report](#)
[ARRL Executive Committee to consider numerous regulatory issues](#)
[Pirates play while FCC cat is away](#)
[Dave Raycroft's ICPO Bulletin](#)
[DX News from the ARRL](#)
[Ulster 434 MHz SSDV Balloon Flight](#)
[New RSGB amateur licence forums](#)
[Lighthouse saved in fire](#)
[HF Interoperability Exercise 2013 in full swing](#)

AMATEUR RADIO NEWS (various sources)

[DX News -- ARRL DX Bulletin #41:](#)

by W1AW Bulletin via the ARRL on October 10, 2013

This week's bulletin was made possible with information provided by NC1L, PA3AD, 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.

[This Week in Radiosport:](#)

by The ARRL Letter on October 10, 2013

This Week in Radiosport:

[Army MARS Seeks Partnership with ARRL, ARES:](#)

by The ARRL Letter on October 10, 2013

Representatives of the US Army Military Auxiliary Radio Service (MARS) met with ARRL staff at League Headquarters October 2 to discuss ways the two organizations might collaborate in emergency response activities.

[Hams Collaborate to Greet Juno Spacecraft On Flyby; Results are Pending:](#)

by The ARRL Letter on October 10, 2013

Radio amateurs around the globe greeted NASA's Juno spacecraft October 9 as it looped past Earth for a gravity-assisted boost on its way to Jupiter.

[Government Shutdown Prompts Changes In National Wildlife Refuge Week:](#)

by The ARRL Letter on October 10, 2013

Due to the partial US Government shutdown, the National Wildlife Refuge Week Amateur Radio special event scheduled to run October 12 until October 20 has suspended rules that confine NWR Week stations operations within the boundaries of national wildlife refuges and wildlife areas. The government shutdown has closed some, if not all, federal wildlife refuges, so stations may operate from any location for this year's event. Although rules 1, 2, 3, and 4 have been suspended; all others remain in effect.

[Society of Amateur Radio Astronomers Issues Call for Conference Papers:](#)

by The ARRL Letter on October 10, 2013

The Society of Amateur Radio Astronomers (SARA) is seeking papers for its 2014 Western Regional Conference.

[The ARRL Foundation Invites Scholarship Applications:](#)

by The ARRL Letter on October 10, 2013

The ARRL Foundation is currently accepting applications from eligible young radio amateurs pursuing higher education. More than 80 scholarships ranging from \$500 to \$5,000 are awarded annually.

[Nominations Due December 31 for 2013 ARRL International Humanitarian Award:](#)

by The ARRL Letter on October 10, 2013

Nominations are due December 31 for the 2013 ARRL International Humanitarian Award. This award is conferred upon a radio amateur or amateurs who demonstrate devotion to human welfare, peace and international understanding through Amateur Radio. The League established the annual prize to recognize Amateur Radio operators who have used ham radio to provide extraordinary service to others in times of crisis or disaster.

[Pacific, Asia DX Operations Announced:](#)

by The ARRL Letter on October 10, 2013

The Daily DX reports several opportunities to work some rare and semi-rare DXCC entities in Southeast Asia and the South Pacific this fall. This is not a definitive list, and details may change.

[Informal Grenada Commemorative Operations Set:](#)

by The ARRL Letter on October 10, 2013

It was 30 years ago this month, after an army-backed pro-Marxist coup degenerated into civil disorder on the Caribbean Island nation of Grenada, that the US military spearheaded an intervention known as "Operation Urgent Fury."

Window Opens for 2014 Dayton Hamvention Award Nominations:

by The ARRL Letter on October 10, 2013

Dayton Hamvention is soliciting nominations for its 2014 awards for Amateur of the Year, Special Achievement, Technical Excellence, and Club of the Year. All Amateur Radio operators are eligible. Nominations must be received by January 17, 2014, to be considered. Winners will be recognized at the 2014 Dayton Hamvention, May 16, 17 and 18.

Tibet Radio Operator, Diplomat Robert W. Ford, Ex-AC4RF, (SK):

by The ARRL Letter on October 10, 2013

Robert W. Ford, who operated from Tibet as AC4RF from 1948 to 1950, died September 20 in London. He was 90.

Getting It Right!

by The ARRL Letter on October 10, 2013

The article "FCC Issues Warnings for Amateur Radio Infractions, Unlicensed Operations" in The ARRL Letter, October 4, 2013, in the second instance should have referred to the Communications Act of 1934

NASA's Juno Probe and Ham Radio:

by NPR Radio on October 10, 2013

NASA's flight path for its Juno space probe, which is expected to buzz Earth at 3:21 p.m. ET on Wednesday.

MacLoggerDX Version 5.49 Released:

by Don Agro (VE3VRW) on October 10, 2013

Dog Park Software is pleased to announce that version 5.49 of MacLoggerDX has been released.

Near-term local fleas,

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

Flea at MIT

Sunday, 20 Oct 2013

Buyers \$5.00, 9:00AM-2:00PM (\$1.00 discount with flyer:

<http://web.mit.edu/wlmx/www/swapfest/swapfest-2013.04.pdf>) Parking Lot & Garage on Albany St. Cambridge, at Portland St.

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



**Interstate Repeater Society
Amateur Radio Club
Derry, NH
Operating frequencies:
146.850 224.460 449.6250**

Interstate Repeater Society Flea Market

Saturday, 2-Nov'13

Buyers \$3.00, 8:00AM-12:00 noon

Londonderry Lions Club

256 Mammoth Rd.

<http://goo.gl/maps/HZaHW> (A pleasant drive after PART Breakfast)

<http://www.irs.nhradio.org/Flea.html>

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.

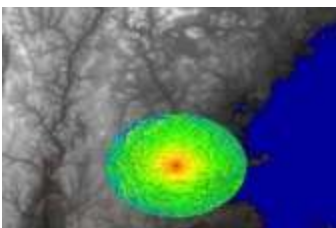
EmComm events and repeater use

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.



Repeater 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, 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

- 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.

PARTicles © 2013, a publication of PART of Westford, MA – WB1GOF

This month's editor: Terry Stader – KA8SCP

PART official mailing address is:
PART, PO Box 503, Westford, MA 01886

Our website is: <http://wb1gof.org>

Our forum is: <http://wb1gof.net/forums/>

Contact us at: info@wb1gof.org

Follow us on Twitter: www.twitter.com/wb1gof

Like us on Facebook: www.facebook.com/wb1gof



Scan this
QR code

