



# *PARTicles*

The newsletter of PART of Westford, MA – WB1GOF

*December 2012*

## President's Column

### - *Andy Stewart (KB1OIQ)*

I'm sitting in the shack, trying to figure out what to write for this month's article, hopeful that the sounds of CW on 80m will inspire me. I'm still waiting for that "perfect" satellite pass of SO-50 to test my homebrew AZ/EL rotator. I think I fixed it last time, but perfect passes are few and far between, especially since I don't want to be awake at 2 AM, and my boss would frown upon me leaving work to play with the satellites. Hopefully, I'll have good news for next month's PARTicles.

I am looking forward to seeing everybody at the PART Christmas/Holiday party, taking place instead of the normal monthly meeting. Don't forget to shop for your Yankee Swap gift! Remember, the price limit is \$20.00, and your gift should be labeled for "ham" or "non-ham". Once again, we have the large private room at the Yangtze River Restaurant in Littleton.

If the predictions about the end of the world are true, you'll definitely want to call the NOD (Now Zero Days) special event station. They will be operating on December 20th and (maybe!) 21st. The QSL card looks like a Mayan calendar, but it may not matter! For more information:  
<http://www.nowzerodays.com/>

There are two volunteer positions that I'd like to fill in PART. The first is the public information officer, and the second is the WRTC 2014 liason. The PIO would be responsible for contacting the traditional media and perhaps the social media with news

about important club events, such as Field Day and our public service events. The WRTC 2014 liason would be responsible for representing PART at meeting related to the World Radiosport Team Championship, to be held in July 2014. This liason would also report to the club any news about WRTC 2014. If you have an interest in helping the club with either of these responsibilities, please contact me via email.

Sitting in the shack while writing an article is very distracting. I'm spending more time turning the dial and practicing CW than I am writing this article.

Linux users will soon be treated to a new version of xlog, courtesy of yours truly. It has been about 2 years since this code was modified. I've updated the code to export ADIF version 2 and Cabrillo version 3. I plan to fix one more minor bug before releasing it, just in time for Christmas. Keep your eyes open for version 2.0.6:  
<http://savannah.nongnu.org/projects/xlog>

If the line for Santa at the mall is too long, why not talk directly to him on the radio? You didn't \*really\* want to sit on his lap, now did you? On December 23 and 24th, Santa will be the net control operator on the "Santa Claus Net" in the vicinity of 14.300 MHz. This is a great opportunity to get kids on the air to talk to Santa. For more information:  
<http://14300.net/santainfo.htm>

Have a lot of fun, and 73!



## *Next PART Meeting – Jan. 15<sup>th</sup> 7:30 PM- @ the Westford Police Station*

*No December meeting! (Holiday Dinner instead)*

### ***NOD – The End of the World is Coming! December 20 – 22nd***

That's right Amateur Radio Operators. Better get all your fun in before Dec 21st. After Doomsday, all bets are off. You'll have three chances to work NoD. Dec. 20th, the day before. Dec. 21st, we'll be on the air as destruction rains down on us. Dec. 22nd. Well, that's a little iffy right now.

We'll be on the air on 10-through 80 meters at various times as power is available and antennas stay up. Don't miss this once in a lifetime chance to work NoD. QSL with SASE via KK5W . . . If we make it!

Call for operators for NoD

Doomsday is almost here! And it is not too late for you to help with the celebration. We need volunteers to get NoD on the air. If you are willing to operate NoD from your home station for one hour or more on any of the three days, please send an e-mail to NoD.doomsday (at) gmail (dot) com. Let me know what band and mode and time period(s) you selected.

You can help celebrate Doomsday, the end of the world by signing up to operate with the special call sign, NoD on one or more of the three days of the official Doomsday Celebration.

December 20th, Pre-Doomsday Celebration

December 21st, The real deal or

December 22nd, If we are still here. Plans for December 22nd are a little iffy right now.

You won't have to leave the comfort and safety of your personal bomb shelter and it will be a timely test of your Doomsday communications. Remember, it just might be your last QSO.

We designed a unique QSL for Doomsday, you can see it on our the Doomsday website at <http://www.nowzeroday.com/qsl.html>

NoD-Now Zero Days

Special Event Station for Doomsday!

The End of the World!

Contact Us On Dec. 21, 2012

It might be your last 73.

[www.nowzeroday.com](http://www.nowzeroday.com)

NoD.Doomsday (at) gmail (dot) com

## Upcoming PART Meetings/Events

### December 18<sup>th</sup>, 2012

- PART Annual Holiday Dinner – Yangtze River, Littleton – 6 to 9 PM.

### January 5<sup>st</sup>, 2013

- PART monthly breakfast. Westford Regency. 8-10 AM (\$14/\$9; kids: \$8 – see note below)

### January 15<sup>th</sup>, 2013

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

### February 2<sup>nd</sup>, 2013

- PART monthly breakfast. Westford Regency. 8-10 AM (\$14/\$9; kids: \$8 – see note below)

### February 19<sup>th</sup>, 2013

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

### March 2<sup>nd</sup>, 2013

- PART monthly breakfast. Westford Regency. 8-10 AM (\$14/\$9; kids: \$8 – see note below)

### March 19<sup>th</sup>, 2013

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



## Monthly PART Events

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

## Treasurer's Report

### PART Treasury between 16-October '12 & 19-November '12 (As of 15-October '12)

	General Fund	Repeater Fund	Checking Total
Old Balance	\$2,674.81	\$1,520.89	\$4,195.70
Income	\$27.00	\$90.59	\$117.59
Expenses	(\$45.12)	(\$0.00)	(\$45.12)
Net	(\$18.12)	\$90.59	\$72.47
New Balance	\$2,569.69	\$1,611.48	\$4,268.17

### PART 2012 Membership as of 9-November '12

	Individuals (= New for 2012 ( + Renew for 2012)	Households (= New for 2012 ( + Renew for 2012)
Full (\$25)*	46 (= 15 + 31)	46 (= 15 + 31)
Senior (\$15)*	32 (= 6 + 26)	32 (= 6 + 26)
Family (\$30)	19 (= 4 + 15)	9 (= 2 + 7)
Student (\$15)	0 (= 0 + 0)	0 (= 0 + 0)
Associate (\$10)	2 (= 2 + 0)	1 (= 1 + 0)
Grand Total*	99 (= 27 + 73)	88 (= 24 + 64)
ARRL members:*	88	
ARRL Life members:*	9	

\* Starred lines denotes changes since last report

### Latest new PART members

*WoTJP – Tim from Fitchburg*

\* 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



Members and a spouse / guest are invited to:  
The PART winter holiday Dinner  
Tuesday December 18 2012  
Cocktail Hour Begins at 6:01pm  
Buffet Dinner from 7:00 – 7:59 pm  
Gift Swap from 8:00 pm to 9:14 pm

Yangtze River Restaurant

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<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.

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

To participate in the gift swap:

Please bring 1 Yankee Swap <http://www.yankeeswap.com/> gift per person. Swap gifts should be “useful” new items priced under \$19.99. Ham specific gifts should be marked as such.

NOTE: Space is limited and Advance reservations are needed... so we can give the restaurant a headcount. Please reply with (number of persons attending) by or before December 11 2012.

Reply to: Hugh Maguire N1QGE via E-Mail To: [hulin127@verizon.net](mailto:hulin127@verizon.net)

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# Santa Claus Net

December 23rd and 24th 1400 to 1900 ET. Email Bob AA4EE with any questions. Click [HERE](#) to email Bob.

Time EST   UTC		December 23	December 24
1400	1900	AA4EE	AA4EE
1500	2000	W1WCN	W1WCN
1600	2100	KB1K	AA4EE
1700	2200	KI4HRY	KI4HRY
1800	2300	WX4PBC	WX4PBC
1900	2400	OPEN	OPEN

## Ham Fleas/Events

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

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

#### 2012

1 Dec Windsor CT VR+C Mus 115 Pierson LN @8AM Indoor John 860 673 0518

#### 2013

16 Feb Marlboro MA AARC @MidSc \$5@9 \$20/T@7 Timothy KA1OS 508 919 6136 T+

17 Feb Westford MA NEARC RadioXLIV @Regency @8 Antique Bruce 603 772 7516 F+

23 Feb S Burlington VT HAM-CON @HI I89x14 \$8@8 \$15@6 Mitch W1SJ 802 879 6589

2 Mar Feeding Hills MA MtTARA @TurnverneinCib Mary N1TOY 413 222 1990 +

3 Mar Hicksville NY LIMARC @LevitHall Richard K2KNB 516 694 4937 A+

29,30 Mar Lewiston ME AARC ME Conv @Ramada Ivan N1OXA 207 784 0350 +

7 April Southington CT SARA @HS \$5@8 \$20/T@6:15 Norm W3IZ 860 584 1403 +

7 April Framingham MA FARA @KeefeTech \$5@9 \$25/T@7:30 Bev N1LOO 508 626 2012 +

13,14 April Wakefield MA Photographica @AmericalCtr ~photo~ John 781 592 2553 +

21 April Cambridge MA FLEA at MIT Nick 617 253 3776 F+

Third Sunday April thru October

3,4 May Deerfield NH NEARFest XIII @FG Mike K1TWF 978 250 1235 T+

19 May Cambridge MA FLEA at MIT Nick 617 253 3776 F+

1 June Hermon ME PSARA @HS \$5@8 Jerry K1GUP 207 848 3400 +

15 June Newington CT NARL @StMarySch \$5@8 \$15/T Vinnie W1VJA 203 987 2108 +

16 June Cambridge MA FLEA at MIT Nick 617 253 3776 F+

21 July Cambridge MA FLEA at MIT Nick 617 253 3776 F+

18 Aug Cambridge MA FLEA at MIT Nick 617 253 3776 F+

7 Sept Ballston Spa NY SCRACES @FG @7 Darlene N2XQG 518 587 2385 +

8 Sept Newtown CT CARA @TownHall \$5@8:30 \$10/TG \$15/T Joe AB1DO 203 938 4880 +

15 Sept Cambridge MA FLEA at MIT Nick 617 253 3776 F+

21 Sept Forestdale RI RIAFMRS @VFW \$5/Sp@8 Rick K1KYI 401 864 9611 +

13 Oct Meriden CT Nutmeg @Sheraton was Wallingford John N1GNV 203 440 4973 +

20 Oct Cambridge MA FLEA at MIT Nick 617 253 3776 F+

19,20 Oct Wakefield MA Photographica @AmericalCtr ~photo~ John 781 592 2553 +

26 Oct Gales Ferry CT TCARC Auction @FireCo @10 Darryl WA1DD 860 443 7799 +





## 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

NOTE: The Port B node (442.450) is connected to [REF010C](#) Mon – Fri from 10:00 am until 3:30 pm. The Port C node (145.330) is connected to [REF050C](#) Mon – Fri from 10:00 am until 3:30 pm. Users can LISTEN ONLY to D-Star Reflector 10C by linking to this URL: <http://www.radioreference.com/apps/audio/?feedId=5031>

## Monthly PART Breakfast

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

### Monthly Breakfast Pricing

The full breakfast is  $\$10.95 + 18\% + 6.25\% = \$14.00$  (rounded up slightly). This price is unchanged. Here is the math for completeness and full disclosure.

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

*Full breakfast: \$14.00 (same price)*

*Kid's breakfast: \$8.00*



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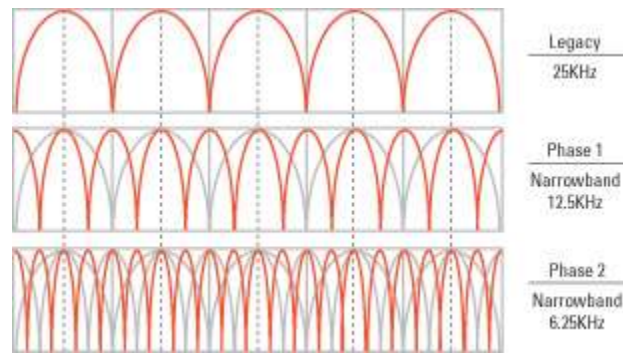
## Tech Topic

### Narrow Banding, Re-farming, what does it mean?

#### - Terry Stader (KA8SCP)

So what is all the hoopla about narrow-banding? The Federal Communications Commission Narrowbanding Mandate requires all nonfederal radio licensees operating 25 kHz systems in the 150-174 MHz and 421-512 MHz bands (VHF and UHF) to migrate to the more-efficient 12.5 kHz (narrowband) channels by January 1, 2013.

First all, a little history. The FCC stated in December of 2004 that all VHF/UHF channels would be used up by the new licensing requirements, so they came up with a plan with industry leaders to move to a narrow-band scheme. Conventional systems were assigned 25KHz channel spacing. The new assignments would be 12.5KHz and no new radio equipment to be sold after January 1, 2013 that was NOT a narrow-band ONLY radio. This was to be Phase 1, Phase 2 was to narrow the bandwidth even further to 6.25KHz channels (NOTE: This is what D-Star is TODAY). No new licenses were allowed after January 1, 2011 that were not 12.KHz systems.



**Figure 1: Narrowband channels allow additional channels to exist in the same spectrum.**

Many cities and towns knew of these new license requirements early than the FCC mandate... like Westford, so when Westford PD decided to move off of the shared frequency with Chelmsford and Tynngsboro, they applied for one of the new narrow band frequency assignments. Many, many more communities could not afford to purchase the new gear (repeaters, portables, mobiles, etc.), so they procrastenated and even some of the communities or industry organizations sued the federal government to push back the deadline (and they succeeded to some degreee) but the 2013 deadline now is “fixed” in stone they say! I guess we’ll see.

There has been a mad dash for many agencies to move to the new emission type. Almost everyone is allowed to stay on their exisiting frequency assignment, but they have to move to the narrow band emission.

Most scanner owners will notice almost immediately when a repeater moves to narrow band. Why? If you cut the bandwidth in half, 25 KHz to 12.5 KHz, there has to be a reduction in the amount of FM deviation allowed by the audio/voice side of the transmission, hence, you have to turn up the volume on the newly narrow-banded to hear the transmissions.

Will any of this affect us in the Amateur Radio Service? According to what the ARRL and FCC indicate, probably not. The issue will be that the manufactureres that produce the gear we use have a bigger marketplace in the commerical/land mobile radio user space than ham radio gear. So, they will probably be making on narrow-band equipment at some future date and us hams will have to adapt. Many hams take commercial gear and put it in to the amateur service... so this whole group of hams (many of them pioneers, so to speak) may be forcing the general ham population towards narrow band technologies.

I’ve ony touched on some of the very general information about narrow band and how it may affect you... as a ham and also as a listener to public safety communications channels.

There is a ton of reference material available to read for additional informations:

*FCC’s web page* - [www.fcc.gov/narrowbanding](http://www.fcc.gov/narrowbanding)

*ARRL’s Narrowband Committee report:*

[http://www.arrl.org/files/file/About%20ARRL/Committee%20Reports/2011/July/Doc\\_26.pdf](http://www.arrl.org/files/file/About%20ARRL/Committee%20Reports/2011/July/Doc_26.pdf)

*New CMED channels for Massachusetts:*

[http://scannewengland.net/wiki/index.php?title=Massachusetts\\_C-MED](http://scannewengland.net/wiki/index.php?title=Massachusetts_C-MED)

# ARRL News

The American Radio Relay League (ARRL) is the national association for amateur radio, connecting hams around the U.S. with news, information and resources. URL: <http://www.arrl.org>



## [FCC Finds New Jersey Ham Violated Communication Act, Reduces Forfeiture from \\$20,000 to \\$16,000](#)

December 13, 2012 - After unsuccessfully appealing to the FCC to cancel his \$20,000 forfeiture, Joaquim Barbosa, N2KBJ, of Elizabeth, New Jersey was issued a **Forfeiture Order** stating that he must pay \$16,000 for “willfully and repeatedly violating Section 301 of the Communications Act of 1934, as amended by operating a radio transmitting equipment on the frequency 296.550 MHz without Commission authorization.”



## [IARU Welcomes Two New Member Societies, Sets New Guidelines for Election of President and Vice President](#)

December 12, 2012 - Earlier this year, the International Amateur Radio Union (IARU) notified its Member Societies that two new national Amateur Radio organizations wished to join the IARU and would need to be voted in: the Federation of Radio Sport of Azerbaijan (FRSA) and the St Vincent and the Grenadines Amateur Radio Club (SVGARC). Ballots from all the Member Societies that responded were counted on November 1....



## [Logbook of The World Web Page Now Features Daily and Hourly Status Updates](#)

December 11, 2012 - The ARRL has created a new informational **page** to issue daily status updates and information of interest to the Logbook of The World (LoTW) user community. These updates will include planned downtime and changes that will impact LoTW operations. In addition, LoTW's processing queue is now **updated hourly**, telling how many logs and QSOs have been uploaded to the LoTW system and are awaiting proces...



## [The Yasme Foundation Announces 2012 Yasme Excellence Award Recipients and Supporting Grants](#)

December 10, 2012 - The **Yasme Excellence Awards** are given to individuals who through their own service, creativity, effort and dedication, have made a significant contribution to Amateur Radio. Their contribution may be in recognition of technical, operating or organizational achievement. The Yasme Excellence Award is in the form of a cash grant and an engraved crystal globe.



## [ARRL Files Petition for Rulemaking with FCC to Create New MF Band at 472-479 kHz](#)

December 10, 2012 - At the 2012 World Radiocommunication Conference (WRC-12), **delegates approved Agenda Item 1.23**: a 7-kilohertz-wide secondary allocation between 472-479 kHz for the Amateur Radio Service, with a power limit of 5 W EIRP (or 1 W EIRP, depending on location). Before this portion of spectrum is made available to radio amateurs in the US, the FCC must first approve its use and amend its rules to refle...



## [FITSAT-1 Satellite to Flash LEDs Over the US and Europe](#)

December 09, 2012 - On December 12 and 13 the **FITSAT-1** CubeSat will be sending Morse code by flashing its array of super-bright LEDs. Depending on local conditions, the



light may be visible to the naked eye and will be easily visible through binoculars. The LEDs will send “HI DE NIWAKA JAPAN.”



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

December 07, 2012 - Solar activity declined again this week, with the average daily sunspot numbers dropping 17.8 points, from 78.9 to 61.1, while the average daily solar flux declined 19.4 points, from 121 to 101.6. Sunspot numbers for November 29-December 5 were 89, 67, 49, 43, 44, 58 and 78, with a mean of 61.1. The 10.7 centimeter flux was 113.1, 110.6, 101.7, 97.7, 96.6, 96.2 and 95.5, with a mean of 101.6. T...



### [Surfin': Ham Tooling Online](#)

December 07, 2012 - By Stan Horzempa, WA1LOU, Contributing Editor (*This week, Surfin' explores the Internet world of online tools for Amateur Radio.*)

My maternal grandfather was a toolmaker. When he died, my father inherited my grandfather's tool collection and added it to his own tool collection. When my father died, I inherited my father's tool collection and my grandfather's tool collection and added it to my own too...



### [Kansas Ham Issued \\$10,000 Fine for Operation of Unlicensed Broadcast Station](#)

December 06, 2012 - On December 5, Glen Rubash, KCoGPV, of Dwight, Kansas, was issued a \$10,000 fine for what the FCC called “willfully and repeatedly” violating Section 301 of the Communications Act of 1934, as amended by operating an unlicensed radio transmitter on the frequency 88.3 MHz in Manhattan, Kansas.



### [Amateur Radio Quiz: Specs or Pepper?](#)

December 06, 2012 - By H. Ward Silver, NoAX, [noax@arrrl.net](mailto:noax@arrrl.net)

*Pondering a possible purchase puts the potential pocketbook provider in a pickle! Unless, that is, they are a savvy savant of specifications. This quiz will lead you through a jumbled jam of jargon to see how well you speak the language of the specification!*



### [Rookies Ride the Wave in the ARRL CW Rookie Roundup](#)

December 05, 2012 - Newly licensed CW buffs can get their copying skills in shape on Sunday, December 16 as the **CW edition of the ARRL Rookie Roundup** takes to the airwaves! The Rookie Roundup combines a competitive event with some on-the-air training, with the goal of bringing fun and Elmering into the 21st century.

Who is a Rookie? Any amateur licensed for three years or less, regardless of license class. If you r...



### [RAC Announces New Incoming QSL Bureau Address](#)

December 05, 2012 - Effective immediately, Radio Amateurs of Canada (**RAC**) has instituted a new, centralized address for its Incoming QSL Bureau. RAC International Affairs Officer George Gorsline, VE3YV, told the ARRL that hams should no longer send any cards through the provincial QSL bureaus. Please direct any questions regarding this new policy to Gorsline via **e-mail**. Please address all QSL cards sent to Canada ...

## Announcing the PART 2013 Kit Building Event

### - B. Scott Anderson (NE1RD)

Continuing the tradition of hands-on ham radio fun, PART will host a kit building event in February (exact date to be announced). PART members can again build their next piece of ham gear with friends and Elmers in a spacious and supportive environment.

### WinKeyer

This year's kit build will have two suggested kits. The first kit is the WinKeyer WKUSB kit from K1EL Ham Radio Kits. This kit provides a USB interface that allows your computer logging program (or other CW utility) to key your radio and send Morse code. The WinKeyer is supported by software on Microsoft Windows, Apple MacOS X, and Linux. There are four buttons on the top of the unit for canned messages such as:

- CQ CQ CQ DE WB1GOF WB1GOF K
- WB1GOF
- R 599 TU
- Or anything else you commonly send

Just a press of the button and your radio sends the configured message. A knob on the front provides easy access to the speed setting. WinKeyer USB can send Morse code from 5 to 99 words per minute.

The unit comes with a very nice metal box enclosure as shown. Though this is a kit, you end up with a finished product that could easily be confused with a pre-built commercial offering from any top manufacturer.

The WinKeyer USB keyer kit can be ordered from the K1EL Systems website [www.k1el.com](http://www.k1el.com) for \$79 + \$7 S/H. There is only one model now sold: WKUSB-HV-KIT. K1EL Systems accepts PayPal and major credit cards through PayPal. Note that you do not need a PayPal account to order; PayPal will happily take your credit card numbers and process it just like any other online vendor. Order early to ensure your kit has arrive in time for the club kit build event.



### AADE L/C Meter IIB

The second suggested kit for the event is the Almost All Digital Electronics L/C Meter IIB (that's "2B" for those of you not of Roman descent). Next to a VOM

(Volt/Ohm/Milliammeter), a capacitance and inductance meter is just about the most handy thing an electronic *tinkerer* can have on their bench. This unit is about the size of a good VOM meter and does a great job helping you sort out parts or confirm values. It also happens to be a very fun (and easy) kit, great for anybody getting started in electronics.

Here is how it works:

1. Set the switches to Lx or Cx, to indicate whether you wish to read inductance or capacitance. Zero the meter.
2. Connect the part you wish to measure to the two connectors on the front of the unit. (The wire binding posts also have banana plug connectors to accept test leads.)
3. Read the value on the display. Easy!



The sample picture (left) is a great one. The part being measured is just a length of wire wound into a small coil with about four turns. The meter computes the inductance of this coil to be 0.359  $\mu$ Henrys. That's how easy this unit is to use!

For those of you wishing to know more technical details, here is the scoop:

- **Range**
  - .001  $\mu$ Hy (1 nHy) to 100 mHy (most units measure to 150 mHy)
  - .010 pF to 1  $\mu$ Fd (most units measure to 1.5 uFd)
  - **(Capacitors must be non-polarized)**
  - AUTOMATIC RANGING
- **Accuracy** 1% of reading Typical
  - Typical means the average error for 60 inductance calibration standards:
    - 20 HP 16470A standard calibration inductors
    - 16 Booton type 103A standard calibration inductors
    - 6 Booton type 62-2A standard calibration inductors
    - 18 Marconi type TM 4520 standard calibration inductors
  - and 83 capacitance calibration standard
    - 7 Heathkit 0.25% capacitance calibration standards
    - 37 Vero 0.1% capacitance calibration standards
    - 39 0.5% decade capacitance calibration standard
    - 10 2% high value capacitance calibration standards
  - See <http://www.aade.com/lcm2binst/HP.html> for detailed results.
  - SELF-CALIBRATING

Ordering is easy. Visit [www.aade.com](http://www.aade.com) and locate the “How to Order” section on the main page. Almost All Digital Electronics offers several options: direct ordering online, phone, FAX, or Email. The unit is also available from several resellers as shown on the page. (Again, you don't need a PayPal account to use the PayPal payment processor for online ordering.)

The AADE L/C Meter IIB kit is \$99.95 plus \$7 shipping and handling for US customers. Please order early to ensure that your kit arrives in time for the club kit event.

## A small change from previous years

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The other PART kit building events offered a club “bulk buy” of the kits to be built. This time we are going to forego that exercise and let club members select their own kit for the event. In previous years, many club members did that anyway so this might not be that big a change after all.

You are welcome to select one of the two kits cited above, or select a completely different kit for the event. Variety is the spice of life! If you do bring something other than these two kits please be sure to show-and-tell with club members. Your choice might become next year's preferred club kit!

# # #

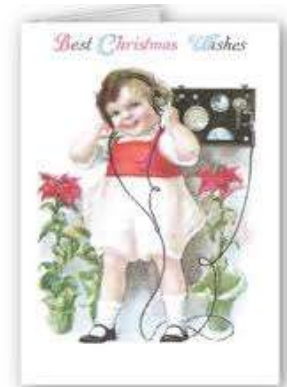
## For Sale or Give-A-Ways

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Several PARTers have the following items:

George Allison, K1IG - I've got QSTs from 1963 (most in binders) that I'm willing to donate as a set.

Richard Bohne, KB1AXE – Yeasu FT-530 w/speaker-mike, no charger, best offer (contact KA8SCP)



## "D-STAR Live" - December 29, 2012

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In a decade, Digital Smart Technology for Amateur Radio, AKA D-STAR, went from an experiment to a serious Amateur Radio mode used by thousands of Amateur Radio Enthusiasts.

But with raising a pre-teen adolescent comes challenges to life as we know it.

The obsessions, tantrums, rumors and the emotional outbursts; "you just don't understand me!" are commonly heard in discussions of the JARL Protocol. Parental memories, you got to love them!

With a growth rate of 2,500 new users per month, there are many questions that arise from those who are generally curious about D-STAR, as well as those who are new users.

One of the most asked questions heard; "where can I learn more about D-STAR?" W5KUB.COM presents a special live video broadcast:

### "D-STAR Live"

*December 29, 2012*

*10:00 AM until 4:00PM Central time (1500 until 2100 UTC)*

Presentations by:

*Ray Novak, N9JA Icom America*

*John Davis, WB4QDX GA D-STAR/[www.dstarinfo.com](http://www.dstarinfo.com)*

*Ed Woodrick, WA4YIH GA D-STAR/[www.dstarinfo.com](http://www.dstarinfo.com)*

*Robin Cutshaw, AA4RC Internet Labs*

Live chatroom host: Tom Medlin, W5KUB

Check out [W5KUB.com](http://W5KUB.com) for details on the show.





## Repeater Information

### Repeater Interference

The 146.955 repeater continues to see interference to existing conversations as well as at random quiet times throughout the day and night. The repeater interference committee needs your help in collecting data. If you hear any type of interference, please report the following info to **"repeater"** at **"wb1gof.org"**:



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

\* Most important - what direction: How did you determine direction? This is the most essential piece of information. Even if it's an estimate as in "Roughly east" or "from the Northeast" it's useful. NEVER EVER reply or direct any thing to the sick person causing the interference. Because some of us have answered this person, he knows we are aware of him and that is what keeps him doing it. Also since you are communicating with a non IDing station you are operating just as illegally as he is. YOU ARE BROADCASTING! NEVER TALK ABOUT INTERFERENCE on air. NEVER

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

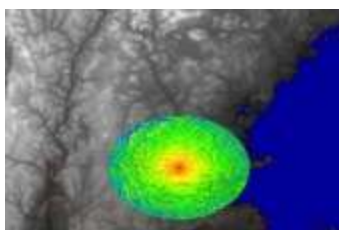
### EmComm events and repeater use

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

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

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

If you have any questions, please feel free to correspond with either Hugh-N1QGE (Westford EmComm/Skywarn NCS) or Terry-KA8SCP (MEMA Region 1 Communications Officer and Skywarn NCS) . They will be more than happy to talk about these programs with you.



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



## PART Gear

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

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



## EmComm

**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.



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This month's editor: Terry Stader – KA8SCP

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